



LEGENDS OF THE WIRELESS PIONEERS



SPARKS JOURNAL

VOLUME 2, NUMBER 2

SPARKS - JOURNAL - QUARTERLY

WILSON TURNER JARBOE JR. EDITION

Honoring Aerial Wirelesman

Wilson Turner Jarboe Jr.



PIONEER . . . Wilson T. Jarboe, now Administrative Assistant-Communications, as he prepared, 25 years ago, for the first Pacific flight. A few minutes later the China Clipper was en route, flying over the then-unfinished Golden Gate bridge.

ON NOVEMBER 22, 1935, some 25,000 people watched the Pan American China Clipper rise from San Francisco Bay, head westward, and fade into the distance en route to Manila and the first commercial flight across the Pacific Ocean.

Since then, 60,125 Pan American Airways' transpacific flights have followed the trail-blazing China Clipper. Every week 35 Clippers leave the West Coast of the United States for Honolulu and the Orient.

EDITORIAL NOTE

Reprinted from the "Pan-Am Clipper" Dated December 1960

Epic flight departed Nov. 11 1935 - 43 years ago. the story appeared on the 25th Anniversary.

Ye Ed.



PATHFINDER ACROSS THE PACIFIC,

NORTH ATLANTIC & LATIN AMERICA

He Accompanied Charles A. Lindbergh

on Epic Surveys as Pan-Am's

Pioneer Wirelesman

On this 25th anniversary of the China Clipper's flight, Wilson T. Jarboe, then radio officer on the plane, recalled the trip as being completely "without incident."

Jarboe, now administrative assistant in Pan American's communications department, spoke in retrospect of his part in the flight of the China Clipper.

"My main recollection of the trip is that I was awfully busy. I was continually sending and receiving position reports, weather information, and flight operational data. And it was all by radio-telegraph 'key'—no voice radio across the Pacific in those days.

"We made two position reports an hour. I would contact the ground station we had just left and the one immediately ahead. In between, I would contact surface vessels. By the time we established our position and, double checked it for accuracy, it was time to take another fix."

The China Clipper carried a crew of seven, three pilots, two flight engineers, navigator, and radio operator. Also, still with Pan American, besides Jarboe, is Victor Wright, then a flight engineer, now a supervisory pilot.

On board the flight were 1,879 pounds of first flight mail—passenger service was inaugurated a year later. Included in the mail was a letter from the late President Franklin D. Roosevelt to Manuel Quezon—who was the President of the Philippines.

The China Clipper made the San Francisco-Manila flight and return in stages, flying at 8,000 feet at the then astounding speed of 130 miles per hour. (Today's Intercontinental Jet Clippers cruise at 40,000 feet at 575 miles per hour.)

THE CHINA CLIPPER, a Martin four-engined flying boat, made the Honolulu leg of the trip in 17 hours, 57 minutes. (compared to today's jet time of 5 hours, 5 minutes). The following day it left for Midway, then Wake Island and Guam, finally arriving in Manila on November 29 after having flown 8,210 miles in 59 hours, 48 minutes. (Jet Clippers make the San Francisco to Manila trip in 16 hours and 5 minutes' flight time).

On December 2 the China Clipper started home, following the same island-hopping route, and arrived before a welcoming throng in San Francisco on December 6. The roundtrip had covered 16,420 miles in routine fashion in 123 hours, 12 minutes flying time.

"We received the traditional lei welcome at Honolulu and had one party, at Manila during the two-day layover before starting home," Jarboe recalled.

"We encountered head winds and fog on various segments of the flight but all had been forecast and did not affect our progress. We were moored at Guam when a typhoon passed."

Jarboe said the basic communication procedures used on the flight of the China Clipper were followed when Pan American inaugurated transatlantic service in 1939 and are generally practiced today by all international airlines. Communications equipment has been vastly improved, and

voice radio-telephone has been put into service clear across the Pacific, but Pan Am's pioneering procedures are still followed.

The China Clipper and other flying boats plied Pacific air routes until 1941 when the flying boats went to war operating special missions for the U. S. Navy. In 1946 landplanes took over. The following year the Pacific Clipper routes were linked with the Atlantic to form Pan American's round-the-world service. In September, 1959, Pan American inaugurated transpacific Jet Clipper service to the Orient and today jets fly virtually all the routes to the Far East and Australasia.

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Crew of China Clipper's first flight. (L/R) W. T. Jarboe, Harry Canaddy, Rod Sullivan, Edwin C. Music (Captain), F. J. Noonan, V. A. Wright.





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**Recording Wireless History for Posterity**

**QRM & QRN**



**WHEN  
STATIC  
REARS  
ITS  
UGLY  
HEAD-**



**How Much Noise is Too Much?**

Government regulations controlling employee exposure to noise have been in effect since 1969 as interim measures. Public hearings on OSHA-proposed regulations were completed recently, and the Department of Labor is expected to announce permanent standards at any time. A brief look at the current and proposed standards is offered here (remember that the permanent standards could vary from the proposed).

The current, interim standards used by OSHA set the following limits for daily exposure:

Hours	Sound Level
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4	115

Currently, there is no limit on exposure below 90 dBA, and it is implied that no exposure over 115 dBA is acceptable without some type of ear protection.

It should be noted that these are cumulative limits; when measuring an employee's exposure, the total amount of noise he receives must be recorded. If he moves around the plant, or if the machinery is shut off for two hours each day, these variations in exposure must be figured into his daily dose level, which is the ratio between amount of noise one is permitted to receive and the amount actually received.

To figure the dose level, divide the number of hours an employee is actually exposed to a given dBA level by the number of hours he is permitted to be exposed to that level. If the dBA level changes, simply repeat the computation and add the two factors together. The formula is this:

$$\text{Noise Dose} = \frac{C}{T} + \frac{C_1}{T_1} + \frac{C_2}{T_2} + \dots + \frac{C_n}{T_n}$$

Here, C is actual exposure time; T is total time permitted by law at that dBA level. C<sub>1</sub> is the actual time at a different level, and T<sub>1</sub> the permitted time at that level — and so on, each time the dBA level changes or the employee moves to a new area. A dose level of 1 or less indicates compliance with regulations.

The proposed regulations are similar, maintaining 90 dBA as the maximum for an eight-hour day, but imposing some limitations on exposure between 85 and 90 dBA. For instance, an employee could be exposed to 89 dBA for only 9 hours, 11 minutes. Other major changes include a required conservation and testing program for employees with a dose level of .5 or higher, and more stringent monitoring rules.

Some groups, such as the Environmental Protection Agency, would like to see limits lower than 90 dBA for eight hours. The subject is controversial, since lowering noise levels past a certain point is economically and technologically difficult or impossible. The answer to proper regulation lies in finding the limits that will both protect employees and be practical.

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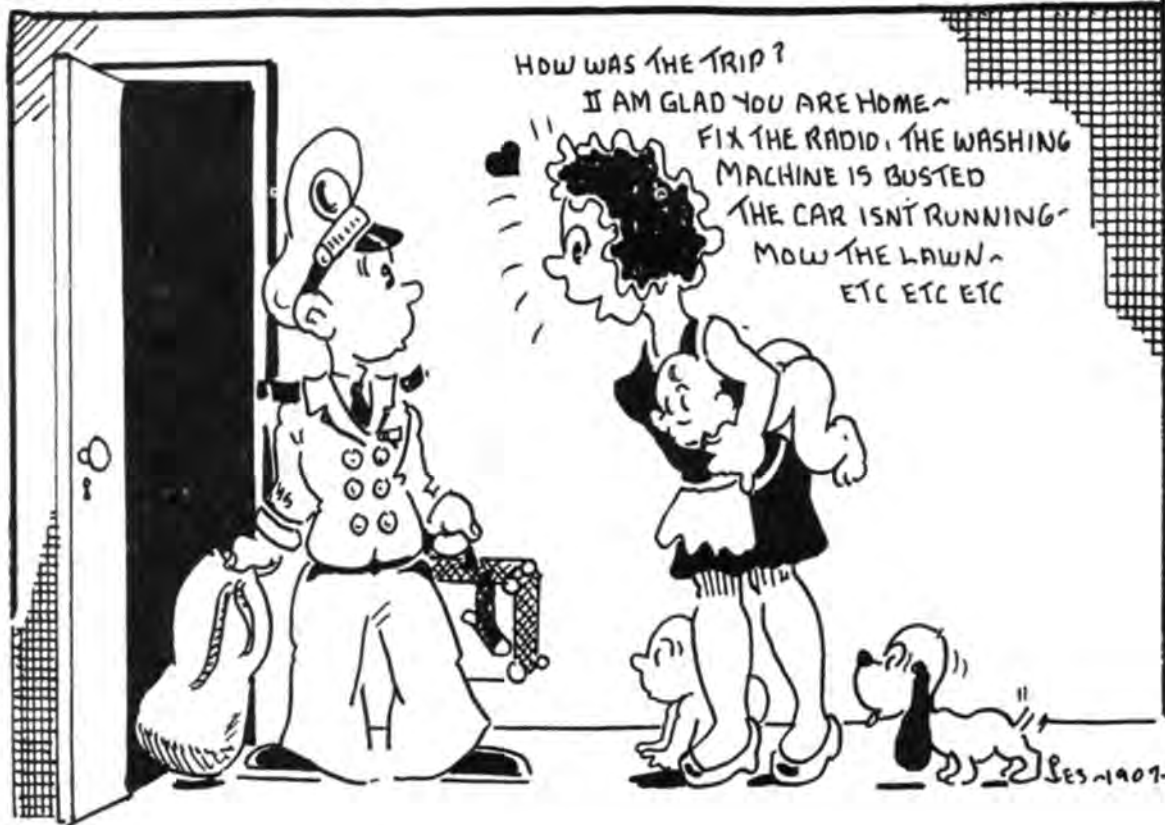
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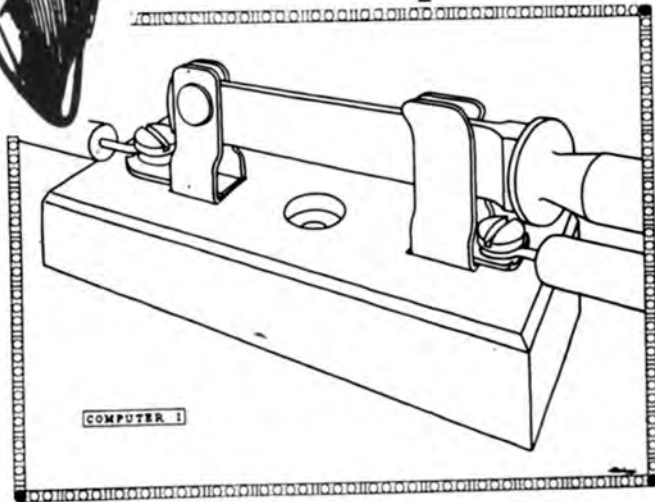
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# The Radio Operator



## 'Since the days of Marconi'

### Lament on a Sea-Going Lumberyard

By "PJ"

From the Japanese shores to the warm Azores,  
From the Straits or the Sound to wherever you're bound,  
Whatever you do you will hear the CQ  
Of a broad husky spark that will ask "QRU?"

(Chorus)

If there's a seldom-traveled spot upon the ocean,  
Or a place that no landlubber ever knew,  
Even there 'tis with regret  
That you open up your set,  
For you'll hear the plaintive murmur,  
"QRU?"

Now it seems that every spark and each little chopper are  
Will all start together when you're trying to get weather,  
So the lightship can't get thru when it sends CQ.  
Let them dangle at the yardarm if they transmit "QRU!"

(Chorus)

If, etc.—

### WIRELESS OPERATORS' CREED

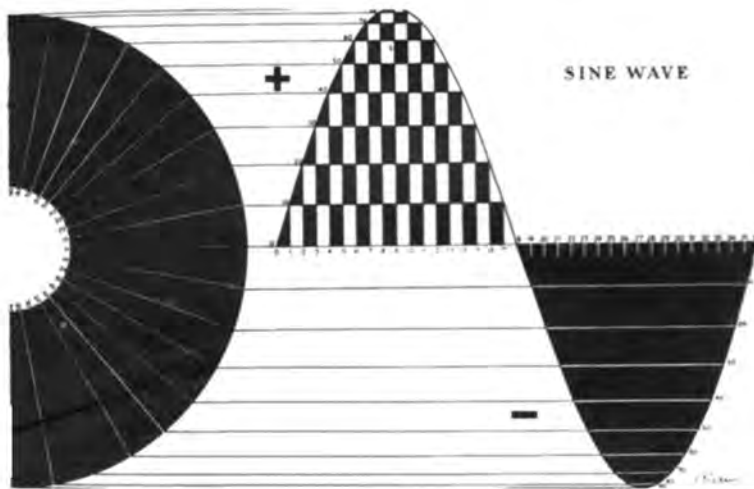
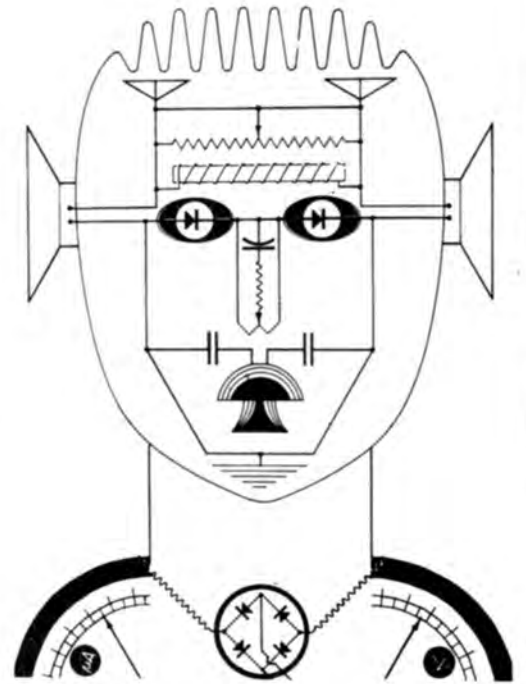
We believe in the service of mankind,  
When we can serve him via the air,  
We believe in keeping the brass hot,  
Until our messages are there.

We believe in the care of apparatus,  
In keeping each part shining bright,  
We believe in keeping it ready,  
For emergency day or night.

We believe in the advancement of radio,  
Each new part of which helps this great game,  
We believe in our ability to hold our own,  
And the success that comes with good name.

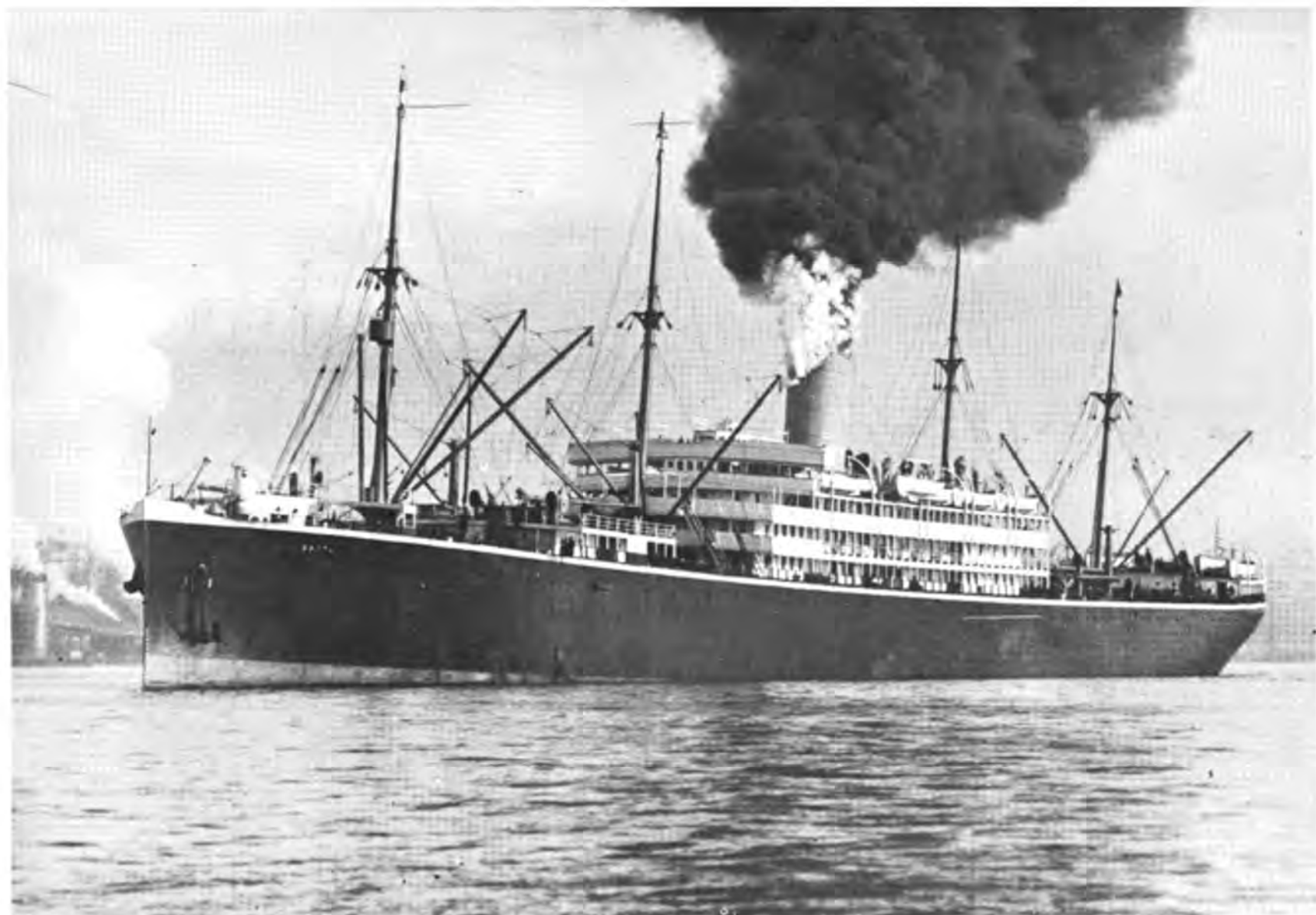
We believe in clearing our traffic,  
With the use of either mill or pen,  
But best of all we pride ourselves,  
For being Wireless Men.

And those of you who read this creed  
Please give us credit due,  
Our sole aim in the wireless game,  
Is to give service to you. "Anon."



### Fred Rosebury

The three drawings on this page are from the pen of our gifted member, Fred Rosebury (1570-SGP) whose book... "Symbols" was reviewed in the Spring 1975 Newsletter. We are happy to report that Fred has agreed to assist the Society in its Editorial Department. We feel very fortunate indeed. Members may hear from Fred now and then on subjects under review.

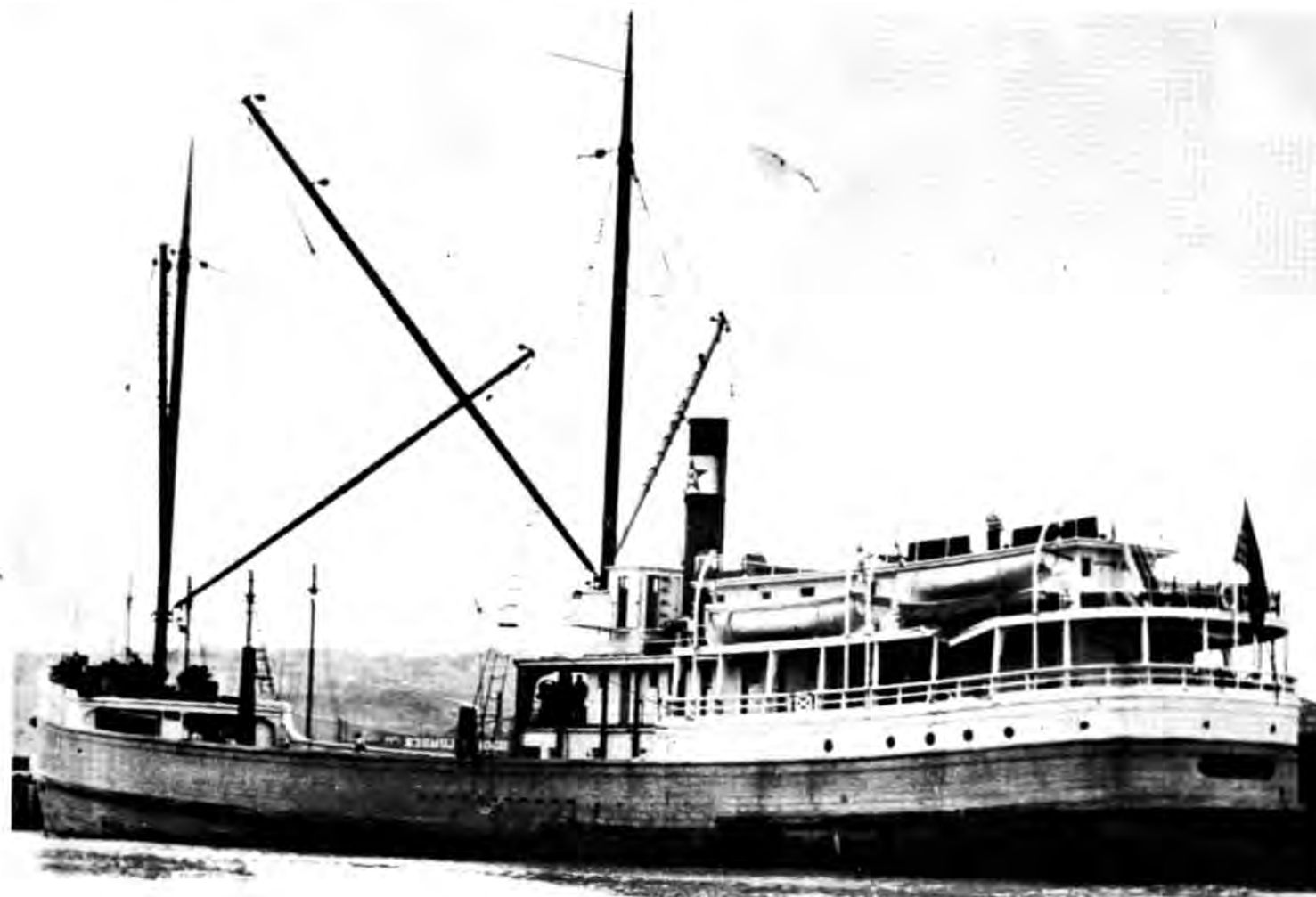


## SS. MINNESOTA "MI" WMI—"Queen of the Pacific"—Circa 1903-1915

The SS MINNESOTA and her sister ship SS DAKOTA launched in 1903 were the largest ships ever built in the United States until that time. Their owner, James J. Hill (Great Northern Railway) placed them on the run from Seattle to the Orient as they could carry great freight loads and 172 passengers in real luxury plus 80 cabin class and 1067 steerage accommodations. Speed was 14 knots. She survived until WW-1 but was plagued by mechanical & structural difficulties. The Dakota grounded on a reef in Yokohama Bay in 1907. Many records were broken in the early days of the wireless by the operators on these two great ships of their day. Call of the SS Dakota was (MD) then WMD.  
Photograph - Courtesy Joe D. Williamson



# - EPISODES & EXPERIENCES -



STEAM SCHOONER MULTNOMAH—WMA

Picture of the Steam Schooner Multnomah was furnished by our good friend Joe Williamson who owns, perhaps the largest collection of marine photographs on the West Coast. (Marine Photo Shop - 285 Shannon Dr. S.E., Winslow, Washington). The Steam Schooner Multnomah resembles the 'ill fated' Klamath so much in appearance that it would take the experienced eye of a Charles R. McCormick "Skipper" to note the difference in the two ships. The Klamath of 1038 tons was built in 1910 while the Multnomah was launched two years later. These steam Schooners became the "first" assignment of many a fledgling wireless man (circa 1914-1925) - give or take a few years. The Multnomah was the first of 42 ships to be built during the following 15 years. Charles R. McCormick started his fleet with the sailing of the Steam Schooner "Cascade" in 1904. (Continued at lower right)

## WRECK OF THE KLAMATH

By—Bernard La Fetra

It was the afternoon of February 4, 1921, that the Steam Schooner Klamath, belonging to the Mc Cormack Steamship and Lumber Co., was preparing to leave for Portland, Oregon. My assistant Wireless Operator, Mr. Ernest F. Wilmshurst and I had checked the wireless equipment and found everything in perfect condition.

What seemed like a normal sailing, later on proved to be a nightmare and the last departure for the "Good Old Klamath."

Our ship, with a compliment of 34 officers and crew and 19 passengers, less than half the normal list, sailed at four in the afternoon and no sooner had we passed Point Reyes, following the California coast, then we headed directly into what proved to be one of the worst gales ever to strike the coast from the Aleutians to southern California. Howling, gale force winds of 110 miles an hour, accompanied at times by rain and hail, lashed the sea into an unbelievable fury, playing havoc with shipping up and down the coast. The Steam Schooner Raymond, radioed for help, the Washington was 35 hours overdue, the South Coast 24 hours overdue, and the Oregon some 30 hours in making port.

In ballast our ship, the Klamath, under the command of Thomas Jamieson, wallowed, plunged and rolled, fighting its way up the coast against almost unsurmountable odds, and was finally driven off its course and struck a reef. Immediately the tail shaft and propeller were rendered useless. Captain Jamieson, sizing up the situation, figured where we were, off Del Mar Landing, two and a half miles south of where the Gualala River empties into the sea, and some 20 miles south of Point Arena, and hastened to order distress signals sent out and all passengers and crew to the decks.

I received many responses to my SOS signals. Station KPH at San Francisco answered immediately. The passenger steamer Curacao bound for Portland and just a few miles ahead of us, radioed she would alter course and come to our assistance. Also a sister ship, City of Everett, under the command of Captain John Foldat, advised they would seek out the (C-Pg.5)

### The Scandahoovian Navy

The 'prestigious' Steam Schooner Celilo (WMF) was the first 'Chief' assignment of Ye Ed following discharge from the Navy after WW-1. We were the 'envy' of the McCormick fleet ... and the whole 'Scandianavian Navy' as lumber schooners were nicknamed because -- we had the first and only electric player piano on the Pacific Coast right in our Social Hall! Trouble was, when we were in port it couldn't be used because the ship's generator was shut down most of the time to ... "save on yu" as Skipper Tietjen used to say.

The "Scandinavian Navy"... So called because most of the skippers of the lumber schooners were from Scandinavian countries. I recall some of the colorful names of these skippers ... "Midnight Olson" of the Acme, who delighted in crossing the Humboldt Bar at Eureka after dark. "Henpeck" Jorgenson who made a 'Christian' of his complaining wife; Hoodlum" Bob Walvig of the Cleone who classed all deck-hand as "hoodlums". It was a colorful operation even if we had to stay in our bunks one Thanksgiving day at the isolated McCormick's Island when the Columbia had frozen over and the engines and generators had been shut down... No heat, no light and temperature was about 15 degrees!

Many a trip we made up and down the Coast in dense fog SANS warning whistles as the skipper didn't want to waste steam. His rationale was that we would 'listen' from the 'other' boats and keep clear of them. Of course many of the skippers of the 'other' boats had the same idea in their indoctrinated sense of seamanship. Quite often the 'inevitable' occurred and I 'was there' when it happened on one occasion.

Those were THE days !!!



# SOS SOS SOS DE WSX

## THE KLAMATH STORY

Klamath. The Point Arena Coast Guard station also responded that they would try and launch surf boats but had to abandon attempts as the seas were too high and rough.

Any attempt to launch our own life boats were futile as the forty foot waves were crashing completely over the stranded vessel, rolling it over on its side with each broadside.

One of the sailors on our ship, Charles Svensen, volunteered to leap into the sea with hundreds of feet of small rope tied about his waist and try to make it ashore. We could hear the waves booming against the rocks and shore but miraculously he was successful. With the small line he pulled heavier rope some three hundred feet or more, and made it fast to a large rock ashore. Over this line a breeches buoy was rigged and one by one, trip after trip, the passengers were sent ashore.

The gale winds, driving marble sized hail stones with terrific force, offered hazardous conditions under which rescue work had to be done. A problem of getting an eighteen months old baby ashore was solved by an ingenious seaman who tied a container similar to a garbage can to his back, and little Phil Buckley, the youngster, was placed in the can surrounded by blankets and the top tightly pressed down, and the seaman went over the long line. Usually during the trip over a wave would smash against the ship rolling it over on its side and allowing the breeches buoy line to sag way down underneath the sea, almost drowning the person making the trip, but the hand of providence saw to it that the baby made the journey over the line without the usual dunking.

While the rescue work was going on, I tried by radio to get every assistance I could but finally had to give up when the ship was being twisted and the masts were swinging in opposite directions breaking the aerial and rendering the wireless useless.

When all the passengers had left the ship, and all crewmen except me, the Captain ordered me to leave and he followed, being the last to leave the stricken vessel. It was about five o'clock when the rescue work was completed. Soaked to the skin with the freezing winds howling about us, passengers and crew members had to huddle together as close as possible to keep from freezing to death.

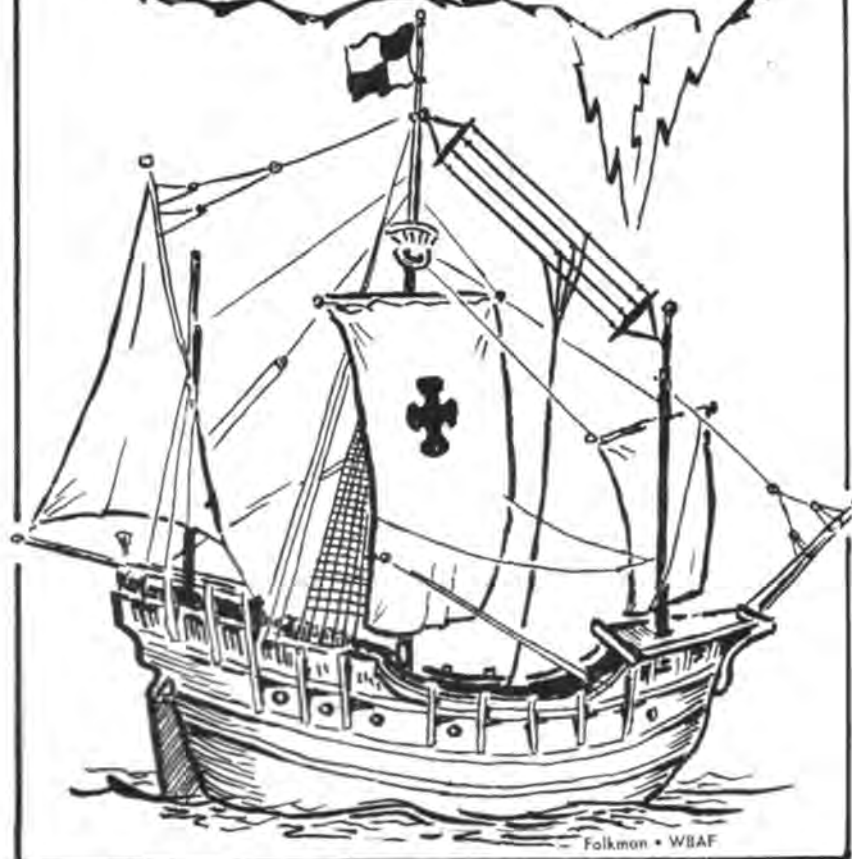
At dawn, and just light enough to see, Captain Jamieson climbed the cliffs, located a house in the distance and appealed to the occupants to please give the passengers food and help.

Off-shore, still wallowing about in the heavy seas, was the steamer Curacao, wondering if it could be of any help. The wireless operator aboard the Curacao, Mr. Halle Medcalf, thought of a way to communicate with us on shore. Using the ship's whistle, he blew many long blasts to attract my attention, and then started spelling out in long and short blasts like dots and dashes, he spelled out a message which I read. "If you do not need us wave white flag," and I repeated it verbally to the Captain who immediately took off his white shirt, tied it by the sleeves to a long stick and waved it toward the north. Great clouds of smoke poured from the stack and the Curacao steamed out of sight.

Within the next day or so, most of the passengers and crew were hauled by horse and wagon, over the washed out roads, to Point Arena where they were transferred to auto stages and taken up the coast sixty miles or more to Fort Bragg.

THIS IS THE SANTA MARIA CALLING THE NEW WORLD MARINA...PLEASE ADVISE IF YOU HAVE DOCKING SPACE FOR MY THREE SHIPS.....AND FOOD FOR EIGHTY EIGHT HUNGRY SEAMEN.

Signed --CHRIS COLUMBUS, ADMIRAL.



Eight or ten of the crew, including my partner and I, were selected by the Captain to stay at the scene of the wreck, to see if the Klamath could possibly be towed off the reef. The Red Stack Company's ocean going tug Sea Lion had arrived at the scene and sent an officer ashore in a small boat to plan for the effort to free the Klamath. At high tide, early one morning, all of us went back over the line to the wrecked vessel and managed to get large hausers from the tug fastened to the ship. I managed to make some hasty repairs to the wireless equipment so that I could send a short distance and communicate with the Sea Lion. When everything was ready, orders to start pulling were radioed to the tug, and all of us left the ship for safety reasons.

Hausers tightened like fiddle strings and from shore we could see that the decks and superstructure were literally being pulled out of the ship and the Captain realized then and there any efforts to save the stricken vessel were doomed.

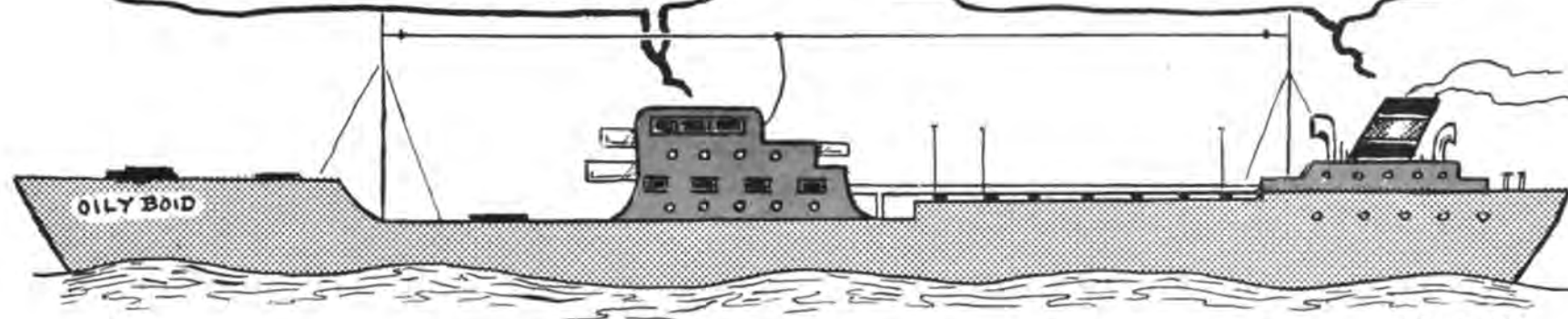
The Captain then decided to keep us there for a few days longer in order to do some salvage work. We returned to the vessel after the storm subsided, over the line, and dismantled all valuable articles sending them ashore over the line. I carefully sent all the wireless equipment ashore and it was later picked up and brought back to San Francisco and eventually installed on another ship.

When we had completed what salvage work we thought feasible, we left the Klamath breaking up badly and being chewed to pieces on the rocks. We had to walk to Point Arena, about twenty miles, and next day were picked up by a mail stage and taken to Fort Bragg. Here we caught the narrow gauge steam train through the woods to Willits and eventually to Sausalito, the end of the line. Then by ferry boat to the Ferry Building late that night, and were greeted by officials of the Mc Cormack Steamship Company, and some who were lucky had their wives or loved ones to welcome them home.

--Bernard W. La Fetra

"HELLO, ENGINE ROOM? CAN YOU SPARE A FEW DROPS OF OIL FOR THE SQUEAKY HINGE ON THE RADIO SHACK DOOR?"

"STAND BY AND I'LL CHECK -- WE'RE ONLY CARRYING SEVENTY THOUSAND BARRELS OF THE STUFF THIS TRIP."







## ... Of Ships & Men

### Episodes & Experiences



#### C. G. S. ARCTIC Enroute Baffin Land

As chief wireless officer of the Canadian Government Steamer C.G.S. Arctic in 1924, I can give the following regarding my SOS:

When the C.G.S. Arctic left the Queen's Wharf, Quebec, on Saturday, July 5, 1924, she was very much overladen with about 300 tons of coal in bags, and about 10 tons of lumber as a deck load, the hold and bunkers below being completely filled. These were supplies for the Royal Canadian Mounted Police posts located in Baffin Land and Ellesmere Island, this Eastern Arctic patrol being the purpose of the Arctic's yearly trip, starting in 1922.

The Arctic (VDM call sign) was primarily a sailing ship, the steam plant being for manoeuvring in the ice. We had fair weather from Quebec City to the Straits of Belle Isle and after clearing the straits we were running northward before a southeast gale which had the whole of the Atlantic Ocean behind it. We were about 100 miles off the coast of Labrador and about 150 miles north of Belle Isle when the southeast wind dropped for about 3 hours. Then a northeast gale hit us, giving mountainous cross-seas which came aboard. Due to our deck load, the scuppers were blocked and the seas went down the companionways. We had about 5 feet of water in the stokehold and put out our fires. Captain J.E. Bernier, who was 72 years old in 1924 and had been a master mariner since he was 17, ordered me to send an SOS at 2 a.m., July 13, 1924, estimated position 54.40 N & 54.50 W. I sent the SOS on 600 M Spark and later on 1800 M. W.C. for about 5 minutes, maybe 10 minutes, when the D.C. generator in the engine room ceased, due to lack of steam, as the rising waters in the stokehold had put our fires out!

I continued to send the SOS on the 10" emergency spark coil, Edison cell powered, the 10" coil being the same as illustrated in Vol. III of "Sparks," for about 10 minutes on 600 M. No answer was heard to my SOS calls. Incidentally it was the only peacetime SOS Captain Bernier had ever requested in the 55 years as master!

Fortunately the northeast gale subsided but not until everyone had assisted in getting the ten tons of lumber and about 250 tons of coal overboard. We then spent 48 hours pumping out the ship by hand. She frequently rolled 45 degrees either side of vertical, the hull being egg-shaped, so as to rise up if she was caught in ice. The Arctic was built in Germany in 1901 as "The Gruss," a German Antarctic exploration ship similar to Norway's Fram.

--W.F. Choat, VE3CO

E&E

#### Aircraft NC 30095

November 4, 1944, Pan American Airways Clipper, a DC-3, flying from Guatemala City, Guatemala to Cozumel Island, Mexico, a small island due east of the Yucatan Peninsula, landed normally at Cozumel and at 11:30 p.m., immediately following takeoff developed a malfunctioning port engine and was forced to land at sea approximately 40 miles north of Cozumel and the same distance from the land mass of Yucatan Peninsula. Aircraft designed with flotation tanks built into wings which enabled it to float. This was a Saturday night and isolated area. Floated aimlessly approximately 4½ hours awaiting Mexican salvage tug who towed aircraft to Cozumel.

Immediately upon landing on water sent SOS on 600 meters using long wire kite antenna. Various stations responded - WNU, New Orleans, Coast Guard in New Orleans, Mexican coastal station (call unknown) in nearby Merida, Yucatan, Havana, Cuba, etc. Meanwhile PAA regional control station in Guatemala City 'TGE' was contacted who actually coordinated efforts re alerting the Mexican tug. There were no surface vessels near. Maintained 100% communications on CW on 600 meters as well as company 3 Mhz frequency. There was another PAA clipper aircraft enroute from New Orleans to Guatemala City with whom I also maintained contact and they arrived overhead at low altitude to drop inflatable life rafts. We did not require them as had our own but due quite rough sea and swells were not able to use. All hands removed safely. Aircraft later overhauled and back in service.

--Louis C. Skipper,  
504-V



#### Lightship CHESAPEAKE

**T**was during the fall hurricane season of 1936. Our "little" lightship, the Chesapeake, was stationed about 15 miles out from land at the entrance of Chesapeake Bay. For 24 hours the ship was being tossed around in the high seas with winds of 70 to 100 MPH or more. The engines ran continuously to help take the strain off the anchor chain. Practically all freighters or passenger ships were safe in port. Conversely, come hell or high water, a lightship must remain "on station" according to regulations. During the second night, the hurricane was getting worse and worse. The ship would ride the crest of a wave then come down the slope causing the large anchor chain to jerk and snap with a thundering roar. I put cotton in my ears. About 2 a.m., the first mate (the captain was on leave) came up to my topside radio shack, shaking like a leaf and could hardly talk. He finally muttered, "Bowers, this can't last much longer." I took one look at him and said, "Mate, you don't have a life preserver on." He replied, "Damn it, Bowers, so I haven't, help me put one on." So after being tossed around in the radio shack, I finally got one on him. Shortly afterwards, there was an extra loud bang, like a cannon going off, and I heard one of the crew shouting, "There she goes." Needless to say our anchor chain had broken and we were helpless in the storm. Then huge waves came pouring down on us, tearing up the top side and carrying away our life boats, etc. Within a few minutes the first mate again practically crawled up to the radio shack. How he made it, I'll never know. In a very trembling voice, he said, "Bowers, send an SOS. We are being blown westward toward shore and are going to crack up. You know what to send." With that he bounded out the door and was caught in a large wave. I thought he was lost. Should I go and help him or send the SOS. Luckily he made it to the hatch. So, on emergency power (a bank of 120 V batteries) and with me bracing against the bulkhead, the ship sometimes at 45 degrees, I sent the SOS giving our position as somewhere off the regular Chesapeake Lightship station and drifting westward. You all know that I was pretty scared. Almost immediately, praise the Lord, NAM (Navy Norfolk) and RCA (New York) came back. NAM advised to stand by and



**MANY HAVE BEEN CITED FOR BRAVERY**





they would contact the Coast Guard. In about 30 minutes (those were long, long minutes) we were in the "eye" of the hurricane, not drifting, just turning around. In a few hours, or at daybreak, I received a call from the Coast Guard cutter saying they were on their way, would reach us shortly and tow us in.

Another message from the Superintendent of Lighthouses stated that a relief lightship was being sent out to "take up" the station. Meanwhile, RCA contacted the news media and broadcasting stations about the SOS. So the news was out that morning. Yes, my wife, in Annapolis, Md., heard it. You can imagine her thoughts.

Well, do you want to hear the rest of this story? This is the irony of it, or the sad part (as far as I am concerned).

During that eventful morning, the Coast Guard cutter showed up and soon had us in tow. However, they were waiting for the relief lightship to arrive. I kept calling the relief ship but no answer. This was strange to me. Finally it appeared and at about 100 yards away the captain shouted through his horn, "We are sending over a life boat for Bowers because we could not "raise" the relief radio operator at Portsmouth. Thereupon, with me cussing out everyone and everything, I was 'shanghaied' amidst large waves over to the relief ship. I almost got caught between the lifeboat and the ship when climbing aboard. Honestly, fellows, after the ordeal I went through, I was literally stuck on the relief ship for another month, while MY ship, officers and crew were being towed safely to port. That's why I finally got into the CAA but that's another story.

--Ray L. Bowers, 1369-V

## TEXACO NORTH DAKOTA

The following describes the distress I was involved in in 1973, aboard the "Texaco North Dakota" on a voyage from Tampa, Fla., to Port Arthur, TX:

Description of vessel: SS Taxaco North Dakota, owned by Texaco, Inc. Steam tanker, 536 ft. long, gross tonnage of 12,789, 154,000 barrel capacity, official number 265006. Call letters KFDG.

While in the Gulf of Mexico at 1412 GMT on Oct. 3, 1973, in position Latitude 28-13.5N, longitude 89.40 West, had a severe explosion in pumphoom and engineroom number 9C cargo tank, etc. As further explosions were expected at any second, I was instructed by Captain J.H. Welch, to send SOS and get our position on the air as soon as possible. At 1418 sent SOS and our position, without waiting to send the alarm signal. WPA-Port Arthur and NMG-(USCG) New Orleans, along with about 5 or 6 ships answered immediately. The only names of the ships I can remember were the "Sugar Islander" (first on scene) and the Texaco Florida, which stood by us until relieved by the Texaco Kansas which stayed with us until the tow took us in tow.

Three men were killed and two badly injured. We were lucky, as about 8 or 10 state rooms were completely demolished and no one was in them.

--"JD", Irvin, 854-PA, W5TSH

## S.S. KITTEGAUN

SS Kittedgaun/KITG, American Export Line, cargo vessel, New York to Near East. Now enroute Piraeus (Port of Athens, Greece), to Salonika. Passengers consisting of persons displaced by World War I, who were quartered under tarpaulin erected over midship house. There were no injuries to crew or refugees.

At 5 p.m. the Captain ordered SOS "SS Kittedgaun on fire 20 miles south of Panomi." NWC U.S.S. Du Pont answered immediately and repeated SOS broadcast. At 6:40 p.m. the U.S.S. Dupont was in sight and Panomi Light bore 355 degrees true, and was able to work NWC on blinker while proceeding toward Salonika.

The cotton fire in hold was extinguished in the Gulf of Salonika but the fire ate up the stewards coal supply in the side pocket. A number of refugees left the ship in Salonika while others remained with us to a further destination at Constantinople and Black Sea ports.

Something over five years ago, while employed at Cooper Hospital as Electrician, I was drawn into a conversation with a patient, one Edward Doidge of Collingswood, New Jersey, also an electrician by trade. It turned out that he was naval radio-man on a destroyer in those waters and remembered picking up my distress call back in 1919.

--- James Donald Haig, 1836-S/SGP  
(Silent Key - March 1977)

In days of old when nights were cold  
We used to wear red flannels.  
Distress was labled "CQD"  
And Marble made good panels.

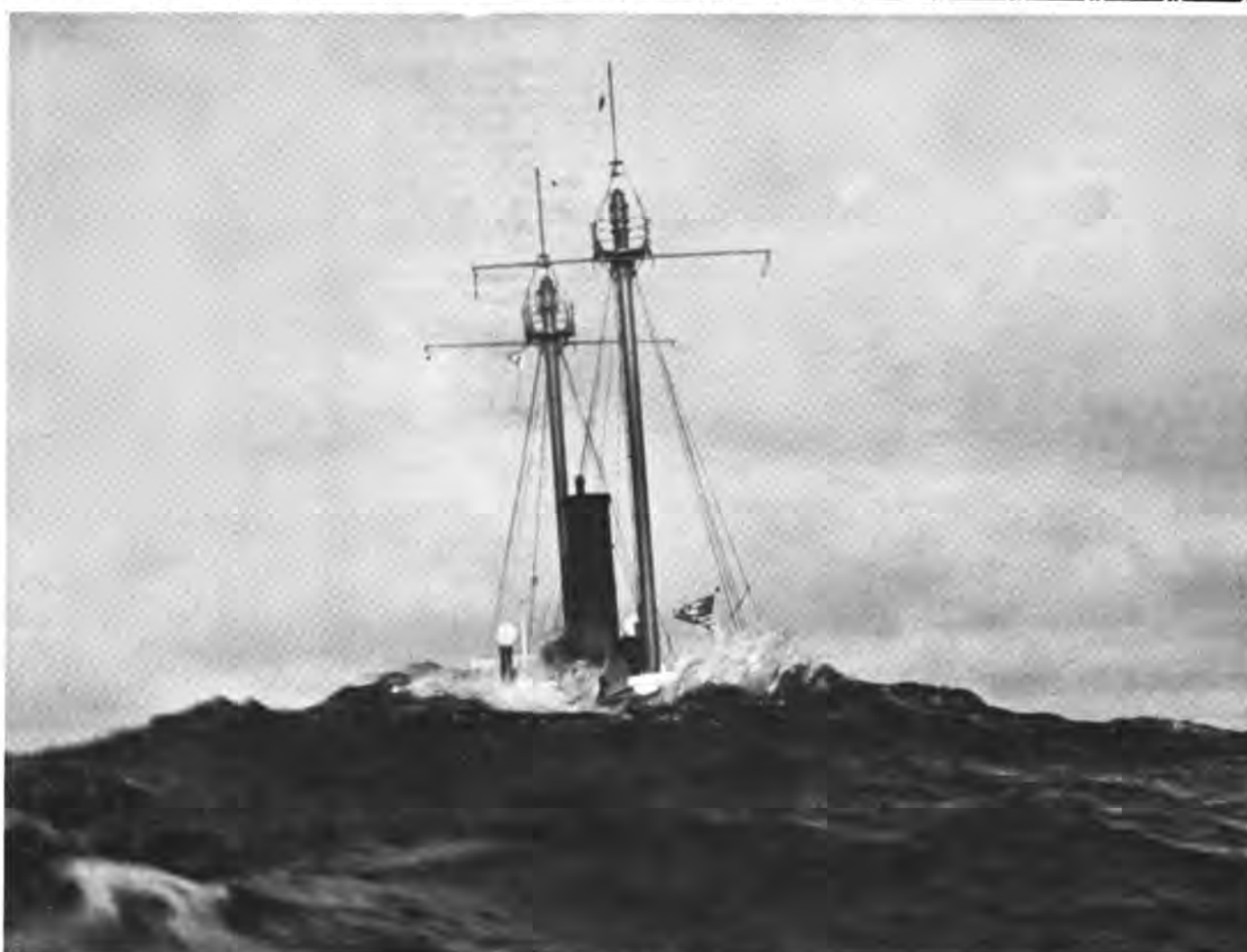
We'd press the key - and golly, Gee!  
Strong ozone filled the shack --  
The Leyden jars would stress and strain  
To the raspy spark gap's crack.

But now we've reached a modern year  
That's hard to recognize;  
Instead of bulky, noisy gear  
Its QUIET -- MINI-SIZE.

The day they took Dan Webster's book  
And put RADIO in its pages  
Old WIRELESS retired -- yes,  
The fun has died by stages!

--Ralph C. Folkman, 586-P

Unusual picture of the Nantucket Lightship taken in the trough of a seaway by deceased member David L. Brown, (647-P) Dave became a silent key April 10 1972.





# STRANGE MYSTERIES..

## OF THE SEA



### STRANGE MYSTERIES OF THE SEA



BY JIM GIBBS



The USS CYCLOPS, that disappeared without trace in 1918.

#### THE CYCLOPS MYSTERY

The sea, that ageless seducer, lures many ships to her murky depths, and consistent with legend, hates to give up her dead.

Without doubt, one of the most baffling is the case of the Navy collier *Cyclops*, a 542 foot vessel which displaced 19,360 tons. She sailed from Barbados on March 4, 1918 with 309 men and 10,800 tons of manganese ore, and completely vanished from the face of the sea.

The *Cyclops* was built at Philadelphia by William Cramp & Sons and launched May 7, 1910. She cost \$822,500 and was considered a first class Navy cargo carrier. As of January 8, 1918 she was assigned to the Naval Overseas Transportation Service. Under this command she loaded 9,960 tons of coal at Hampton Roads and sailed for Bahia, Brazil, where she arrived two weeks later. Her cargo was discharged and she later cleared for Rio de Janeiro. There she loaded a full cargo of manganese ore and sailed again on February 16 via Barbados for Baltimore. This was the last time she touched a port, and the last time the vessel was ever seen again.

There were no wireless messages, no calls of distress, no bits of wreckage—nothing.

Despite a long and exhaustive search by the Navy Department, no trace of the ship was forthcoming.

Theories by the dozens were advanced, bred on the wartime hysteria of the times. And of course, the ghoulish pranksters had a nautical field day. Bottles washed up on various shores with notes about sabotage, enemy action and violent storms. Even a faked diary or two turned up purporting to detail the fate of the vessel.

The *Cyclops*, literally swallowed up by the sea, has become the most baffling mystery in the history of the U. S. Navy. No stone was left unturned in a search for the ship. There were no enemy submarines reported in the Western Atlantic at the time, and with the end of World War I, every effort was made to obtain information from German sources regarding any part they might have played in the disaster. Additional information was requested from all attaches in Europe, with a conclusion that German U-boats and German mines were not responsible for the loss of the *Cyclops*.

The vessel carried a complement of 15 officers, 221 enlisted men, six naval officer passengers, 64 naval enlisted men passengers and two U. S. Marine passengers. This total came to 308 military personnel plus one U. S. consul member from Rio de Janeiro, for a grand total of 309.

It is known that when the *Cyclops* departed Barbados that one of her two engines was in need of repair and that she was proceeding at a reduced speed, but even if one engine had gone entirely out, it would not have brought the ship to a standstill.

Master of the *Cyclops* was Lt. Cmdr. George W. Worley, USNR, a man of unquestionable character.

How a ship of such a great size could completely vanish without so much as a trace—a lifejacket, a ring buoy, a lifeboat, a piece of wood bearing the ship's name—is almost without precedent.

A navigation chart will show that had the *Cyclops* continued her prescribed course from Georgetown to Baltimore, she would have run north and west through the eastern Caribbean and just inside the Lesser Antilles, passing out into the Atlantic again between the northerly islands of St. Thomas, and then have set a course for Hampton Roads. From Georgetown to St. Thomas she would not have been at any time more than 50 to 55 miles from the Lesser Antilles, to the eastward.

There is indeed a lot of water in the Atlantic but in well traveled sealanes there should have been at least one positive clue as to her disappearance.

Perhaps the most advanced theory is that German spies were aboard, and with outside assistance, took her through one of the many eastward passages of the Lesser Antilles into the open Atlantic, or again she might have been diverted to an entirely diverse course and headed for some unknown port. Even had she reached some other port, no matter how remote, it would be virtually impossible to hide the existence of a ship with such a multitude of kingposts and other overhead structures. Making the matter even more complex was the fact that the *Cyclops* was equipped with both submarine detector and the latest communications equipment.

Following her disappearance, both naval and commercial vessels as well as planes not only scoured the area but called at all out-of-the-way ports seeking the slightest word of the ship's whereabouts—all to no avail.

As was mentioned earlier, the *Cyclops* was last heard of when she departed Georgetown March 4, bound, according to orders, for Hampton Roads. On March 18, two weeks later, an advertisement appeared in a Rio de Janeiro newspaper announcing that a requiem mass would be held for Alfred L. Moreau Gottschalk, U. S. Consul General at Rio de Janeiro, "lost when the *Cyclops* was sunk at sea." This advertisement was signed by several prominent men in Rio, but later all disclaimed responsibility for its appearance, and it has never been satisfactorily explained.

It was not until a month after this incident on April 18, that the U. S. Navy Department issued a public notice that the ship was presumed lost with all hands.

Despite a clean record, Commander Worley is considered by many theorists to have been the key figure in the disappearance of the *Cyclops*. Known as a strict disciplinarian, the fact that he was German-born had much to do with the belief that he was involved. A popular theory is that he delivered the ship to the Germans, he having disposed of some property including his home in Newark, N. J., just before sailing on this fatal voyage.



Such a scheme, however, appears highly improbable owing to the great number of men aboard the vessel. What could have happened to them and why were none of them ever heard from again?

Men have strained their brains for several decades trying to find a plausible solution to the case but thus far nothing that would hold water has been forthcoming, nor is it probable that there ever will be. The *Cyclops* and her entire crew are gone, and dead men remain silent.

#### VANISHING NAVAL VESSELS

Though none touch the *Cyclops* for intrigue, there are several ships of the U. S. Navy that have disappeared in the past 200 years. Each of their fates is cloaked in a veil of mystery.

Between 1775 and 1955, the Navy lost 850 ships due to all causes in peace and war. Of these, several are marked in Navy files as "Cause of Loss Unknown."

The list of 18 missing ships follows in sequence of date:

March 18, 1781—*Saratoga*, 18-gun sloop-of-war, sailed from Haiti, escorting a convoy. Report shows she attacked two ships capturing one, then disappeared while in pursuit of the other. Her crew consisted of 86—six officers and 80 enlisted personnel. Vanished without trace.

August 8, 1800—*Insurgent*, 36 guns, commanded by Capt. P. Fletcher, sailed from Norfolk, Va., for the West Indies with a crew of 340 and was never seen again.

June 20, 1805—the gunboat No. 7 sailed from New York for the Mediterranean. She disappeared without trace. Estimated crew between 25 and 43 (records vague).

August 9, 1812—the *Etna*, sometimes referred to as *Aetna*, 12-gun brig, vanished without trace in a gale off New Orleans, 30 officers and men lost.

October 9, 1814—*Wasp*, vanished at sea with 141 officers and men, shortly after speaking the Swedish brig *Adonis*. She was in command of Captain John Blakely.

July 15, 1815—the *Epervier*, a brig of 18 guns was en route from Tripoli to the United States, passed Gibraltar bound westward and vanished with her entire complement of 142 persons.

January 11, 1821—the *Lynx*, sailed for Kingston, Jamaica, and disappeared with her crew consisting of one officer and 50 enlisted men.

October 28, 1824—the *Wild Cat*, of three guns, with 15 men aboard sailed from Thompson's Island in the West Indies, for Cuba, and vanished without a trace.

September 10, 1829—*Hornet*, of eight guns, with a crew of 140 officers and men, was driven from her anchorage at Tampico, Mexico, by a heavy gale and no trace of her was ever found.

August, 1831—*Sylph*, carrying one gun, sailed from New Orleans, bound for the West Indies and vanished with three officers and ten men.

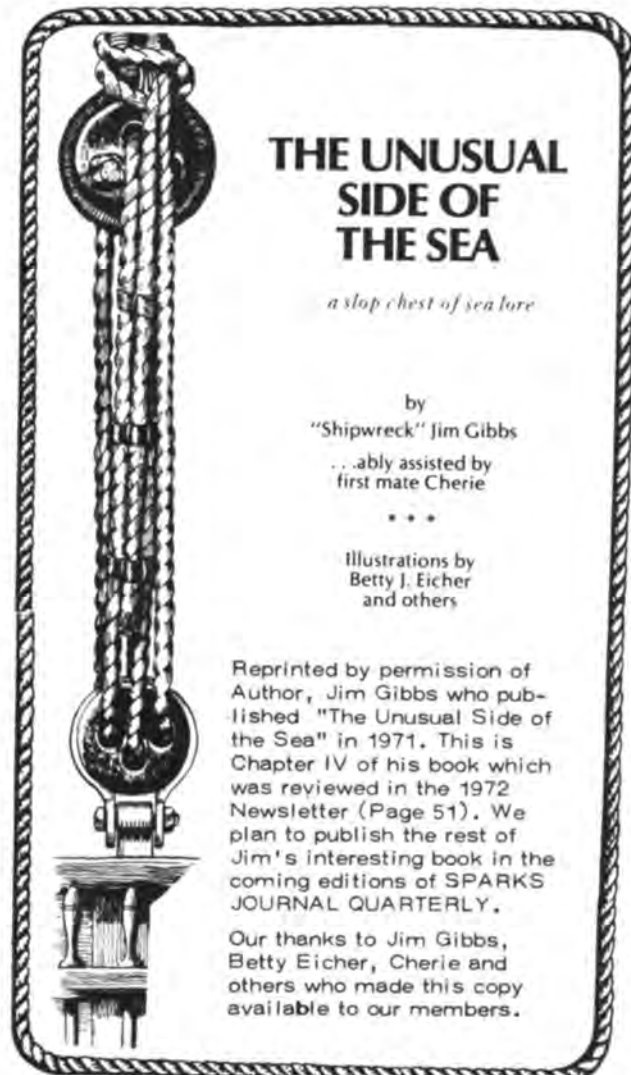
March 14, 1839—*Seagull*, a tender with the Wilkes' South Seas expedition, sailed from Orange Harbor in Tierra del Fuego, bound for Valparaiso, Chile, with 16 men and was swallowed up by the sea.

March 14, 1843—*Grampus*, believed the victim of a gale; last seen off Charleston, S. C. Lost with her crew of 65.

September 21, 1854—*Porpoise*, a brig, last seen on this date by the *Vincennes* in the Strait of Formosa. Vanished with her crew of 69.

September 29, 1854—*Albany*, with a crew of 193 sailed from Aspinwall, Nicaragua, (now Colon, Canal Zone), bound for New York and went missing with 18 officers, 152 enlisted men and 23 marines.

CONTINUED PAGE 9



#### THE UNUSUAL SIDE OF THE SEA

a slop chest of sea lore

by  
"Shipwreck" Jim Gibbs  
...ably assisted by  
first mate Cherie

\*\*\*

Illustrations by  
Betty J. Eicher  
and others

Reprinted by permission of Author, Jim Gibbs who published "The Unusual Side of the Sea" in 1971. This is Chapter IV of his book which was reviewed in the 1972 Newsletter (Page 51). We plan to publish the rest of Jim's interesting book in the coming editions of SPARKS JOURNAL QUARTERLY.

Our thanks to Jim Gibbs, Betty Eicher, Cherie and others who made this copy available to our members.



September 18, 1860 — *Levant*, sailed from Hilo, Sandwich (Hawaiian) Islands, for Aspinwall, Nicaragua, and vanished with her entire company of 210.  
 March 15, 1910—Navy tug *Nina* sailed from Norfolk to Boston on February 6 and was never again reported. She is believed to have gone down in a storm with 30 officers and men.  
 March 4, 1918—loss of the *Cyclops* with 309 men, as already told in this chapter.  
 March 23, 1921—fleet tug *Conestoga*, sailed from San Francisco on February 25 for the Hawaiian Islands by way of Samoa. No further word was received from the vessel despite an ocean-wide search. Vanished with four officers and 52 enlisted personnel.



Curious seafarers of the *DEI GRATIA* view the abandoned *MARY CELESTE* at sea.

## THE MARY CELESTE

Since the practical use of radio, radio beacons, radar and other magic aids to navigation, the annual toll of lost ships has very much diminished and the book of unexplained mysteries of the sea is no longer as voluminous as it once was. In days of yore, the black-robed clerk repeatedly mounted the announcer's pulpit at Lloyd's of London, tolled the bell of the ill-fated *Lutine* and announced the loss of a ship.

The thought of a ship missing with all hands stirs the imagination no end, but something of a more baffling nature is the finding of a ship without her crew.

By far the most publicized mystery of the seas is the case of the *Mary Celeste*. The disappearance of the crew of this abandoned vessel has troubled the feeble mind of man since the episode occurred in 1872. Literally volumes have been written about the incident.

Storms delayed the *Mary Celeste's* sailing for three days as she rode at anchor off Staten Island. Then under the command of Captain Benjamin Spooner Briggs, a master mariner of high repute, she set sail. The stout, little half-brig moved out through the narrows and into the broad Atlantic, leaving New York in the sea-mist.

Alcohol was her cargo, 1,701 barrels destined for Genoa, Italy. As her canvas filled, she set her course toward the Straits of Gibraltar.

Complement of the *Mary Celeste* in addition to Captain Briggs was his wife Sarah, their daughter Sophia, two years old, and a crew of seven men. Albert G. Richardson was first mate, husband of the ship operator's niece. For second mate the skipper had signed Andrew Gilling, while ship's steward was Edward Head. The remaining four members of the crew were brothers, Volkert and Boz Lorenzen, Arian Martens and Gottlieb Goodschaad.

All was shipshape when the *Mary Celeste* got underway. She carried a crew of experienced seafarers, the master being a man respected by all, with a reputation as a Christian and an intelligent and capable master mariner, as court findings later concluded.

He piloted his ship across the Atlantic with normal progress until, as the logbook revealed, the area of the Azores was reached.

On December 4, the British brigantine *Dei Gratia* which had sailed from New York, November 15 for Gibraltar, sighted a sailing vessel off her port bow running under shortened sail and yawing slightly. The *Gratia's* signal flags were run up but no answer was forthcoming. Master of the vessel, Captain David Reed Morehouse, was naturally concerned.

Reasoning that the vessel must be in distress, Captain Morehouse shortened sail and stood by. The stranger was headed northwest by north and the *Dei Gratia* southeast, which made it easy to overhaul her.

Through his glass, Captain Morehouse read the name *Mary Celeste* scrawled on the counter. He now recognized her as the same vessel that had been loading in New York, but which had departed before his ship.

The *Celeste* had reversed her course with her sails set in a most peculiar fashion. Her jib and foretopmast staysail were set on the starboard tack. Two of her sails, the foresail and the upper fore topsail, had been blown away; the lower fore-topsail was hanging by the four corners; the main staysail had been hauled down and was lying loose on the forward house. All others were furled.

There was no sign of life aboard the vessel. No man at the wheel, no watch, no one at work on deck. She moved slowly through the water in a sluggish manner.

Again the crew of the *Dei Gratia* signaled and again there was no answer.

It was decided to put a boat over the side and investigate. Into it went Oliver Deveau and John Wright, first and second mates, and seamen John Johnson and Augustus Anderson.

As they pulled alongside, with mixed emotions, they boarded the derelict wondering just what they would find. Was the crew dead or perhaps desperately ill with disease?

A thorough search was made and to their astonishment nobody was aboard. Here was an apparently seaworthy vessel selecting her own course without a human hand to guide her.

Her boat was gone. The bilge was sounded revealing three and a half feet of water sloshing about. There was some leakage too. Hatch covers had either been knocked off or blown off. The binnacle had been forced from its anchorage and the compass destroyed. The wheel swung free. The ship creaked and groaned as it rolled gently on that great ocean.

That the crew had made some sort of a hasty exit, for reasons unknown, was evidenced not only by the missing boat but moreso because the ship master's instruments and papers were missing. Many personal effects were lying about.

The *Mary Celeste's* logbook, found in the master's cabin, showed the last entry on Monday morning November 25. The boarding party was appalled that the vessel had been abandoned. Many sailing ships, fully-manned, were not in as good condition.

The boarding party reasoned that the abandonment must have taken place just after breakfast. There was no evidence of food in preparation, and the dishes had been washed. The bunks in the master's quarters, one with the imprint of a child's head on the pillow, were still unmade. Nor was it conceivable that a meticulous woman such as Mrs. Briggs was reputed to be, would leave the cabin in such a state well into the morning. The vessel therefore must have been abandoned in a great hurry, whatever the reason.

Six months' provisions were discovered in the storeroom and an ample quantity of drinking water for many days at sea.

In the fore-cabin nothing appeared amiss. Bunks had been properly made. The crew's gear was untouched—clothing, toilet articles, even smoking pipes, which no sailor would leave unless a dire emergency demanded, were still in place.

There were no signs of violence aboard the vessel. An old sword, a souvenir picked up by Captain Briggs in Austria, was first thought to have blood stains on it, but later examination proved differently. Mutiny, as the cause of *Celeste's* abandonment was inconceivable under the circumstances.

Stacked in the ship's recesses, searchers found eight barrels of alcohol which were broken—not an unusual number in so large a cargo.

The boarding party removed several of the barrels of alcohol from the hold to the deck for examination. Each one they inspected was found in good condition.

After completing their search, the party returned to the *Dei Gratia* to report their findings to Captain Morehouse. After consultation between the ship's officers, it was decided that the crew would be split and part of them would sail the derelict to Gibraltar and claim salvage.

They were well within their rights, for of such is the international law of the sea.

Mate Deveau and two seamen were chosen to ready the *Celeste* for her voyage in company with the *Dei Gratia*.

After boarding the *Celeste* for the second time, the water was pumped out of her hold. What sail was still in proper condition was set and the ship was ready to get under way just after eight bells on the evening of December 4.

The two ships sailed almost the same course keeping in sight of each other, speaking to each other three or four times a day. All went well and both vessels made fair time, the weather remaining good until just inside the Straits of Gibraltar. There a sudden storm broke and the ships lost sight of each other.

The *Dei Gratia* arrived at Gibraltar a half day ahead of the *Mary Celeste*, and neither vessel suffered any mishap as a result of the storm.

Almost immediately, the *Mary Celeste* and her cargo were placed in the hands of the Marshal of the Vice Admiralty Court at Gibraltar. Cablegrams were dispatched to the *Dei Gratia's* owners, then relayed to the insurance firms—five of them—all of which had insurance on the ship and her cargo.

The message was entered in the Disaster Log of the Atlantic Mutual Insurance Co. as follows:

"Found north and brought here. *Mary Celeste* abandoned, seaworthy, Admiralty impost, notify all parties, telegraph offer of salvage."

One of the *Dei Gratia's* crew testified that the *Celeste* in his opinion was more than seaworthy. He said she was "well found, well provisioned—fit to go round the world, with a good crew and good sails."

Then the plot thickened. It would have seemed by this time some vessel at sea might have picked up the missing men or that they might have been spotted on some remote island. The days, however, dragged on and nary a word was heard from anywhere, despite widespread inquiries.

The character of the missing crew was above reproach said Horatio J. Sprague, the American Consul in Gibraltar. "It is difficult to account for the abandonment, particularly as her master, who was well known, bore the highest character for seamanship and correctness. Besides he had his wife and young child with him and was in addition a part owner in the *Mary Celeste*."

The inquiry into the mystery continued into 1873 with many officials raising objections of one sort or another. Perhaps the bloody sword ran the gauntlet of questioning more than any other one item until later tests proved them not to be blood stains.

Finally from New York came word from a deputy surveyor named Abeel, who questioned the legitimacy of the *Mary Celeste's* registry.

The vessel was constructed in Nova Scotia in 1861, first vessel from the yard of Joshua Dewis. She was christened *Amazon*, and sailed under that name until December 31 1868. On that date she was transferred to American registry and renamed *Mary Celeste*. Abeel charged that irregularities were present and made overtures that looked so much like blackmail to the J. H. Winchester Co., the *Celeste's* principal owners, that they took immediate exception. The attacks shortly after lessened considerably and little to substantiate Abeel's claim could be found. He had insisted that an attempt was made to show her as an American built ship, since she was completely retitled at the time she was renamed and her registry transferred.

Finally, First Mate Oliver Deveau, of the detained *Dei Gratia* was given permission to command that vessel to another port to discharge her cargo while Captain Morehouse remained behind to keep his salvage claim alive and to offer additional evidence in the complicated case of the *Mary Celeste*.

Now, the court bemoaned the fact that Deveau had departed Gibraltar so soon inasmuch as he and not Morehouse appeared to be the key figure in the case.

After every point had been gone over again and again, the case lapsed for lack of further evidence.

Finally on March 10, 1873, the *Mary Celeste*, with a new crew and master sailed on to Genoa to deliver her barrels of alcohol.

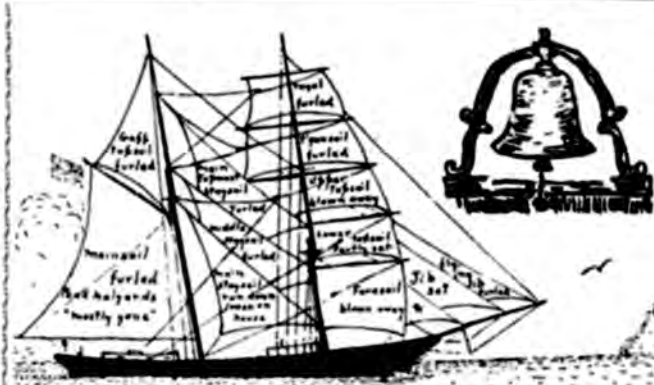
The salvage money was eventually paid to the master and crew of the *Dei Gratia*, but though the case was unofficially ended it has, in a way of speaking, been kept open to the present day. No mystery of the sea has ever received such wide publicity. Reams of paper have been typed and many books and articles published on the subject. Many have been authentic such as the book, *Mary Celeste—The Odyssey of an Abandoned Ship*, by Charles Edey Fay, published by the Peabody Museum in 1942, perhaps the finest presentation on the case. Even better known, however, are the more fanciful stories that have been woven around the incident such as J. Habakuk Jephson's *Statement*, published in *Cornhill Magazine* in England in 1884. In the story, the name of the ship was changed to *Marie Celeste*. It was not known for many years thereafter that the unknown author was none other than the inimitable Arthur Conan Doyle, creator of Sherlock Holmes.

His story received international attention, and was accepted by many readers as the truth. This story also opened the door for other writers to capitalize on the subject.

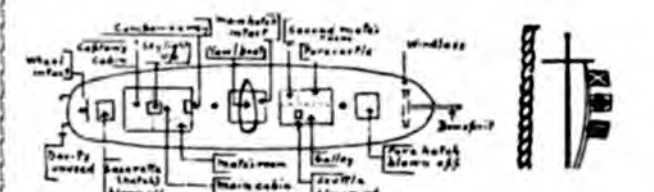
Other errors placed the crew and passengers at 13 and that an elderly man with the name of John Pemberton was steward in lieu of Edward W. Head, whom the records show as a young man.

Among the most accepted inaccuracies was the common statement that "everything on the vessel was in perfect order." Actually, as is recorded in the factual records of the Atlantic Mutual Insurance Company, the binnacle was knocked from its fittings and the compass destroyed, instruments and ship's articles missing, the boat gone. Other accounts have erroneously stated that the galley stove was still warm and that the meal on the table was half eaten.

But here again, Deveau testified that on first boarding the vessel he found no food at the table, no dishes set out and no indication of food in preparation.



Diagrammatic Sketch of the *Mary Celeste*



Deck Plan (approx) COURTESY G. BRADFORD  
 Sail and deck plan of the mysterious *MARY CELESTE*.

Among the most distorted facts given by fanciful writers is the way in which the *Dei Gratia* came upon the derelict. The gullible reader has often chosen to believe the account of a thrilling, suspense packed 48 hour race in which the *Dei Gratia* with every shred of canvas set, finally overtook the *Celeste*. In truth the *Celeste* was having a difficult time doing 1.5 knots when overtaken by the other vessel.

There was a lapse of nearly nine full days from the time of the last entry in the *Mary Celeste's* log until she was boarded, (at Lat. 38° 20' N. Long. 17° 15' W.) yet many have claimed that the time lapse was less than two days.

Perhaps one of the more acceptable theories as to the cause of abandonment revolves around the cargo the vessel carried. Based on the theory that the barrels of alcohol were loaded on a cold November in New York and that the ship later entered the warm Gulf Stream, an expansion of the cargo might have occurred. As will be recalled, eight of the barrels were found broken. The weather was known to be unfavorable for some time before the morning of November 25, 1872 and the hatch covers were doubtless dogged tightly.

Fumes from eight broken barrels of alcohol, under some pressure, might have caused a rush and roar as they found vent through the hatch perhaps on inspection by the crew of the *Celeste*. There might even have been a slight explosion, caused by metal hoops on the barrels rubbing together and sparking to the roll of the vessel.

Such a situation might have frightened Captain Briggs into taking every precaution in risking further explosion, especially with his wife and child aboard.

It might well be assumed that he ordered abandonment, but only as a temporary measure. Inasmuch as he had a monetary interest in the vessel, he would of a certainty be hesitant about leaving his ship. Therefore he might have trailed astern of the *Celeste* in the ship's boat, the painter made fast to the stern of the ship, until the danger had passed.

At this point it might be theorized that a sudden squall arose snapping the painter. The boat, unable to get back to the abandoned ship as the wind filled her sails, might have drifted hopelessly away and have been swallowed up by the sea.

This of course is only conjecture. There have been other plausible suggestions - countless others - ranging from sea serpents to mutiny and from plagues to waterspouts.

On January 3, 1885 just 13 years after the baffling incident, the *Mary Celeste*, in command of Captain Gilman C. Parker, ended her career when she straddled a reef known as Rochelais, (off Haiti) while en route to Haiti from Boston. In a subsequent hearing, the ship's master was accused of barratry when the underwriters became suspicious about the cargo. Heavily insured, the salvaged cargo showed only dummy fish, rubber shoes etc. The guilty captain died while in prison three months later.

The *Dei Gratia* became a coal hulk in Ireland and her bones languished in the backwaters of ignominy near Rushbrooke Dock in Cobh until recent years. Her bell is displayed at the Royal Minster Yacht Club in Cork.

Hasty abandonments at sea have not been unusual. But it is unusual when no clues turn up to tell the whereabouts of the crew. The *Mary Celeste* case, however, is not without precedent.

(Continued on Page 10)

## ABOUT THE AUTHOR...

JIM GIBBS

Author of "THE UNUSUAL SIDE OF THE SEA" is one of those articulate individuals whose love of sea and ships has given us many books on sea lore and things nautical. He draws from a background of experience in the United States Coast Guard, assignments at one of America's most lonesome outposts -- Tillamook Light, and more than a decade as editor of one of the world's best known nautical publications ... The Marine Digest.

Jim Gibbs has received the "Certificate of Merit" from the Seattle Historical Society for his book 'Sentinels of the North Pacific'. Additionally, The Port of Seattle has honored him seven times with their "ANCHOR AWARD" for outstanding maritime writing. His credentials are impeccable.

Our thanks to Author Gibbs for his literary contributions and his efforts to preserve historical memorabilia and history for posterity. We have nominated Mr. Jim Gibbs for 'honorary membership' in the Society of Wireless Pioneers as a token of our appreciation for this dedicated effort.

William A. Breniman  
 President





# STRANGE & UNUSUAL MYSTERIES OF THE SEA - GIBBS

## MORE BAFFLING CASES

An article appeared in *Shipping Illustrated* under the date of January 11, 1908 telling of the Norwegian bark *Viking* in a collision with the American ship *Atlas*. The ships were wedged tightly together. The crew of the *Viking* became panic-stricken for fear their ship would sink, and hastily clambered aboard the *Atlas*. Captain Peterson, master of the badly damaged *Viking*, refused to abandon his vessel, and his wife elected to remain with him.

A seaman, thinking the skipper was temporarily crazed, tried to lasso him with a rope and forcibly haul him aboard the *Atlas*. The captain fought desperately against this foolish maneuver and in the struggle both he and his wife fell overboard and were drowned.

To complicate matters even further, the derelict *Viking* broke away from the *Atlas* but did not go to the bottom. She remained afloat for two months before drifting ashore.

Had the seaman not interfered with the master's judgment, the ship might well have been saved and two deaths prevented. On the other hand, had the *Atlas* by chance of fate sunk after the collision, with no survivors, then the derelict *Viking*, later found abandoned, could have offered as baffling a mystery as that of the *Mary Celeste*.

Another equally interesting case was that of the abandonment of the five-masted schooner *Carroll A. Deering*. She was observed aground on the Outer Diamond Shoal off Cape Hatteras with sails set. An investigation found her void of life. Later she refloated herself and was carried some distance from her initial stranding. Further investigation revealed that two of her boats were missing and the crew of 11 unaccounted for. Mutiny was suspected, and supposition had it that the master was either murdered or forced into a boat, never to be heard of again. Nor were any of the other members of the crew found.

When first boarded by beach patrolmen, the abandoned ship was found to be seaworthy. In the crew's mess was found a half eaten meal and a badly frightened cat that had evidently been the ship's mascot.

The vessel was sighted by the Cape Lookout Lightship the day before she ran aground and the two vessels exchanged signals. The date was logged as January 30, 1921.

Later the Coast Guard dynamited the wreck and parts of her settled into the sand. But as late as 1955 after a stormy season, part of her wreckage drifted out to sea once again, reviving memories of the unsolved mystery. Some of the ship's bones are still partially exposed from time to time in the sands of Diamond Shoals.

There have also been many cases of waterspouts doing serious damage to ships. Some of the better known incidents are here recorded:

The bark *Ceylon* (in latitude 31 degrees North, longitude 71 degrees West) struck by a spout which stripped her of canvas and her main and mizzen masts were carried away. The captain was injured and the mate killed.

Bark *Lillian Morris* (in latitude 27 degrees South, longitude 42 degrees West) hit by the outer winds of a waterspout which stripped her of canvas and carried away a man. The captain was blown about the poop like a piece of paper. The sky and sea seemed one, resembling a smoking furnace of spray.

Schooner *Alice* (latitude 33 degrees North, longitude 61 degrees West) was so wrenched by a waterspout that passed within ten feet of her that she became a total constructive loss.

American schooner *Baltic* (latitude 30 degrees 30 minutes North, longitude 76 degrees West) on April 25, 1888 was struck by a sudden spout at noon. She was immediately thrown on her beam ends, boats carried away, decks flooded and the mainmast had to be cut away to right the vessel.

British steamer *Hestia* (latitude 35 degrees North, longitude 75 degrees West) on April 4, 1902, observed several waterspouts to the southwest. The largest one swung towards the ship passing over her amidships with a deafening roar, strong gusts and sudden shock. The captain from a place of safety saw the log line attached, extend straight upward for 40 feet. Two tarpaulins were ripped off the hatches and a plank eight feet by ten inches went for a joy ride in the air.

Liner *Pittsburg* (in mid-Atlantic) was struck squarely by a waterspout on March 30, 1923 at 2:25 a.m. Water rained down on her in torrents smashing the bridge and doing serious damage to the chart room and officers quarters. The crew's nest, 70 feet above the normal water level, was flooded.

Sudden squalls and strange weather phenomenon, have caught many ship's crews off guard. On March 28, 1908 the American sailing vessel *Eclipse* on a passage to Honolulu from Newcastle, N.S.W., was moving along at a slow gait in a calm sea. It was hot. All sails were set. Due to the extreme conditions, the mate, contrary to custom sent the crew to supper, only he and the man at the wheel remaining on deck.

Suddenly there was a sharp report aloft, the mizzen royal was completely split; the crew alerted by the noise scurried up on deck. Seaman John Nicholson was sent aloft to furl the damaged sail while the others returned to their meals. No sooner had they resumed eating than a tumult broke loose aloft; the fore and main mast yards and many sails and gear were swinging in a jumble of mass confusion. Except for the split royal, the yards and rigging on the mizzen were undamaged. Nicholson, however, was never seen again.

But again back to the *Mary Celeste*, to this day theories on her abandonment are still advanced.

Perhaps the latest of any great or convincing merit appeared in *Life Magazine* a few years back under the title, *The Phantom Islands*, authored by Captain Dod Osborne and edited by Joe McCarthy.

This strange episode is one which occurred while Osborne was on a job for British Naval Intelligence in a 68 foot motor sailer named *Girl Pat*. It has become a plausible theory as to what might have happened to the crew on the *Mary Celeste*.

The *Girl Pat* was passing through uncharted and treacherous waters of the Arguin Banks off the coast of West Africa. Captain Osborne and his small crew were sailing from Port Etienne en route to Dakar. Because of personal reasons he abandoned his course to the west and turned south by east and traveled through the uncharted waters.

The day after they left Port Etienne, the *Girl Pat* was making close to 14 knots using her engine and sails. The wind kept the stout little vessel on a port tack. As frequently happens, south of the 40th parallel, night came on suddenly after the sun had set. Course was altered two points west to south by west. About 10 p.m., Captain Osborne was standing on the afterdeck when he noticed the boat listing slightly to windward. He called to his helmsman and asked how she was heading.

"Dead by south on west," was the retort. The skipper grabbed for the sounding lead and hastily dropped it over the side. At that moment he noticed that the boat was not moving. The sounding revealed they were in but eight feet of water. He yelled at his shipmate to stop the engine and for all hands to come on deck. Then the facts became evident that the vessel was hard aground.

The two crew members who had been below were insistent that the skipper launch the boat for fear the *Girl Pat* had been holed. The sea, however, was not irascible and the water was fast ebbing from about her. Captain Osborne thought it wiser to await the break of dawn before final decisions were made.

Thirty minutes later, the *Girl Pat* was high and dry, almost on an even keel. This was indeed uncanny in a place where tidal fluctuations are known to be very slight.

One crew member volunteered to go over the side to check resultant damage, but the skipper quickly blocked this move on the assumption that the ship might be on quicksand.

So all awaited daylight. Then, a seaman did go over the side with a rope tied under his armpits. To the amazement of all, the sand was hard and he was able to walk with ease in any direction. Then the others joined him and just to pass the time amused themselves by gathering unusual seashells. They were indeed on a small sand islet out in the middle of the ocean.

The inevitable question arose, "What are we going to do now?" The following morning the men saw another islet to the north that had risen from the sea during the night. It appeared smaller than the one they were on, but slightly higher. That afternoon they saw surf breaking to the west of them. Through their glasses they watched the surface of the water becoming calm followed by the gradual appearance of a third islet above the water. Before dark the islet to the north sank and disappeared completely into the ocean.

The fact that one of the islets had disappeared gave the men hope that their ship might again be set free.

One of the crew still insisted that they take to the ship's boat while there was yet time, but again the skipper pointed out to him that the nearest land was the African coast nearly 100 miles to the east. If they rowed that distance in a dinghy they would still have to go ashore and walk in the desert either 120 miles to Port Etienne or 240 miles south to St. Louis. Thirst would be a grave foe to conquer on the desert, or the wild tribesmen of French West Africa might capture and kill them.

The crew elected to remain with the *Girl Pat* until the food ran low. If the islet had still not vanished they would attempt the risky escape in the ship's small boat.

That night they all slept on deck. About three in the morning the captain was awakened by the gentle rocking of the vessel.

The others were already awake excitedly taking soundings. The line showed eight feet of water amidships. In 20 minutes there was 14 feet of water and the engine was started. They moved cautiously through the darkness afraid of running onto another of the islets. Soundings were continuous. Sometimes they scraped bottom, and again there would be up to 36 feet of water. An hour and a half later they stranded again in eight feet of water.

At daylight they found themselves stuck on the northwest shore of another sand islet. At one side were the rusted ribs of a steamship's bow protruding from the sands. The *Girl Pat* had moved about four to five miles from her original stranding. The water was deeper just ahead of them and the crew began kedging their vessel, winching ahead a few feet at a time. Eventually the craft was again free.

The pumps were clogged with sand, churned up by the propeller. The problem was administered to with hastiness, however, and the sails set. The *Girl Pat* drifted slowly north and northwest for 30 minutes and then she was free of all obstacles, back in the deep water with 120 fathoms beneath her keel.

Taking no further chances what with supplies running low, Captain Osborne put back to Port Etienne.

He learned while at this port that the rising and sinking of these mysterious islets was a well known fact in that part of Africa. The natives called them the Phantom Islands.

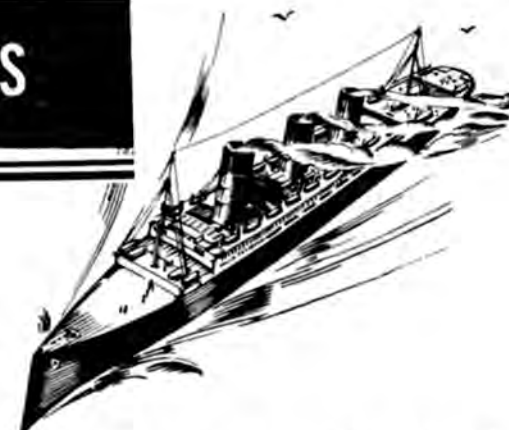
French scientists attribute them to a great river that flows under the Sahara Desert and empties somewhere on the floor of the Atlantic, 60 to 100 miles from the coast. They further believe that the sand gathers in the outlet of this underground river, and, at intervals, tends to clog the outlet completely. Then the dammed up river, increasing its pressure, finally succeeds in belching the tremendous barrier of sand into the ocean. These sudden upheavals of sand form islets that rise to the surface.

Captain Osborne was asked by a Foreign Legion officer if he had seen the remains of a French naval vessel that had been lost in the mystery islands, back in 1919. A rising bank of sand had lifted her right out of the water and broken her back. The crew took to the boats but only a few reached Port Etienne safely. The rest perished in the desert. Osborne recalled the wreck remains they had sighted but was of the opinion that they were not those of a naval vessel, but perhaps some other tragic victim of the phantom shoals.

From his experience, Captain Osborne conjectured that a similar fate may have befallen the *Mary Celeste*. Perhaps her crew finding themselves hard aground on a sand islet, took to the ship's boat and were either victim of a flash storm or perhaps had perished after gaining the mainland.

This assumption was based on the fact that the *Mary Celeste* might have sailed farther south than her records show, as dead reckoning was a common thing in the days of sail. The last given position of the *Celeste* was not excessively far from the area where the Phantom Islands are known to rise and fall.

No records exist on how many vessels have been claimed by these elusive sand islets but they might well offer the key to the mysterious loss of many ships and their crews.



## S.O.S. OF THE OURANG MEDAN

Modern technology has made maritime transportation of our modern age much safer than of old and has eliminated many would be unsolved mysteries of the sea.

But still the uncanny does occur and modern man with all of his knowledge is at a loss to give an acceptable explanation for many happenings on the high seas.



Dutch freighter OURANG MEDAN.

A most baffling maritime mystery occurred in 1948. It involved the small Dutch freighter *Ourang Medan* which was steaming through peaceful seas in the Strait of Malacca, on the sea road to Jakarta. The sun was shining, the sea calm and the weather warm, the kind of a day that delights a sailor. Seaworthy and ideally suited for Southeast Asian trading, the *Ourang Medan* steamed proudly along.

Yet even under such ideal conditions, the still air was suddenly infiltrated with a terse S.O.S. message from an excited individual in the freighter's wireless room. The distress signal giving the location of the ship reached Dutch and British radio centers on the Malay Peninsula and at Sumatra. They requested more details. "Officers including captain lying dead in chartroom and on bridge. Probably whole crew dead!" continued the *Ourang Medan's* chilling message.

The astounded recipients of the impassioned SOS glued their ears to the set for more information. The next transmission came with an indecipherable set of dots and dashes that made no sense.

There was a moment of silence, and then the final spine-chilling message, "I die!"

No further contact could be made with the vessel. Due to the splendid weather conditions and calm seas, the receiving radio centers suspicioned that a crank was pulling a hoax. They, however, followed the routine and dispatched the message to the proper sources which in turn sent rescue and salvage vessels to the scene. By now, they had confirmed the location with their direction finders. From both Sumatra and Malaya went boats.

The given position was correct and a few hours later they found the *Ourang Medan* rolling easily on lazy swells. At first all appeared to be in proper order as a thin whisp of smoke filtered from the stack. On closer approach, however, it was apparent that the ship was not underway but idly drifting. The rescue craft hailed the vessel but received no response, nor could they see any signs of life on her decks. The lifeboats were still in the davits and there appeared no visible damage.

After circling the freighter for 15 minutes it was decided to send a boarding party. As the intruders clambered aboard they were shocked and horrified by what they saw. They were aboard a floating crypt and the chill of death in its most somber form was all about. Scattered about the decks, and draped over the hatches lay the lifeless bodies of the ship's crew. The deceased captain was found on the bridge clad in his uniform. Nearby was the vessel's mascot dog, dead, his tang bared. Two ship's officers were in the chart room and "Sparks", who was evidently the last to succumb, was found slumped in a chair leaning over the transmission key.

What had happened? What caused the death of the entire crew? A hasty search was made of the ship's accommodations but no clue was forthcoming as to what had caused the funereal scene. There was considerable uneasiness among the boarding crew; perhaps poisonous gas, a maddened killer or some other thing or substance was still aboard. The deceased were studied for the affects of foul play but there were no signs or marks of physical violence. It was also discovered that all of the dead were lying on their backs, facing upward, eyes staring as if transfixed by some weird apparition or scene of horror at the moment of death.

The ship's skipper had one hand shielding his eyes and the expressions on the others faces were those of terror.

There was no blood flowing on the decks and no weapons lying about, yet not a soul aboard that death ship had escaped.

The boarding party held a short parley and decided the only sensible thing to do would be to tow the apparently seaworthy ship to the nearest port and turn the whole affair over to the authorities. Ironically, just after they made their decision, billowing smoke was seen breaking out through the hatch covers.

A hasty abandonment was undertaken, and shortly afterward the escapees while in the boats, witnessed a sharp explosion coming from the boiler room; the *Ourang Medan* was immediately smothered in smoke and flames. For sometime she burned furiously, becoming red hot. While the rescue boats stood helplessly by, the *Ourang Medan* suddenly rolled over on her side and then sinking by the stern, lifted her bulk skyward and slithered beneath the surface. In a few moments it was all over; the momentary opening in the sea closed and the nightmare ended.

To this day there has been no plausible or acceptable theory as to how or what actually happened. Most theorize that some kind of deadly fumes were responsible for the multiple deaths aboard the ill-fated freighter. Yet, this theory lacks credence when one considers that many of the dead were on the open decks where it is highly unlikely that a poisonous gas would affect them.

Even more baffling is the fact that all hands were lying on their backs staring upward, indicating that whatever it was that snuffed out their lives came from heavenward rather than from the bowels of the ship. The mysterious tale of the *Ourang Medan* will indeed go down in the annals of the maritime as an unsolved mystery of the sea.

(Continued - Page 11.)



Navigator takes a sighting.



PACIFIC SQUARE-RIGGERS



WEST COAST WINDJAMMERS





Mystery ships, superstition and the sea.

### VALIENTE VANISHES

In these same Southeastern Asian waters another sea mystery occurred in the year 1966. A grimy, black-hulled coastal freighter sailed from Singapore setting a course for DaNang, in the Vietnam war zone. In her holds she carried 550 tons of cement and 85,000 feet of copper wire, plus a few tons of general cargo.

On March 14, the vessel, SS **Valiente**, radioed her owners that she was off Nha Trang and would arrive at her destination port of DaNang two days later. But she never arrived, there, or any place else. She literally vanished.

No trace of the **Valiente**, no radio signals heard, and no oil slicks sighted, despite a wide-ranging search. None of her crewmen were ever again reported seen.

Colin Taylor, a British merchant, and shipper of the cement aboard the **Valiente** likened her disappearance to that of the **Mary Celeste**.

The strange part of this story is that the **Valiente** vanished while steaming within sight of the South Vietnamese coast in the regular shipping lanes, and the sea was almost like a mill pond on the day she last reported.

The cargo of cement was consigned to the United States Air Force in DaNang. The copper wire worth about \$2,100, had been purchased by Far Eastern Enterprises, an American trading firm, for delivery to a Saigon building contractor.

The veteran freighter was built at Ardrossan, Scotland in 1910, measured 185 feet in length and was of 709 gross tons. Her owner was a Chinese firm in Singapore named Tiong Lam Hang, Ltd., but the ship flew the "convenience" flag of Panama. Numbering about 20 men, the crew was made up of Chinese, Malaysians and South Vietnamese.

Following her disappearance, the U. S. Seventh Fleet and the Vietnamese Navy searched the area, tooth and comb, without avail—not even the slightest clue. Even the American Embassy, assisted the Vietnamese government in a fruitless investigation.

Like in all mysteries of the sea, men will offer theories. Seafaring men in Saigon offered many. One such theory was that American patrol planes may have mistaken her for an enemy coastal trawler and sunk her.

Chinese merchants in Cholon, hinted they had private communications channels and theorized that the **Valiente** had somehow been captured by the North Vietnamese and taken to Haiphong.

These theories, however, did not seem to hold up. Lloyd's of London refused to list the vessel as missing because of what the insurance company described as the "suspicious circumstances" of her disappearance.

The mystery remains unsolved.



### GHOST OF U BOAT -166

The sea is full of surprises. One that really shocked the maritime fraternity of the Gulf area was a report in 1971, that a "Flying Dutchman" had assumed the role of a mysterious submarine drifting about in the depths, unmanned.

The submersible was claimed to be a German U-boat of World War II vintage which reputedly had been moving underwater and undetected for 30 years, covering more than 400 miles and additionally threatened the Florida coast with a deadly cargo of mercury and munitions.



### VANISHING SHIPS

Howard Zeller, Southeastern chief of water quality standards for the Environmental Protection Agency, was ordered to investigate the situation after a commercial salvage operator reported finding the sub in 25 to 50 fathoms of water near Tampa Bay on Florida's West Coast. When Zeller in turn, notified the government that the strange underwater marauder still bore the number **U-166**, naval researchers discovered that a U-boat with that number was actually reported sunk by Allied action off New Orleans in 1942.

"It's apparently the same submarine," the official said with a somewhat startled admission. "The only explanation we have is that it, like the legendary **Flying Dutchman**, has just drifted aimlessly with the ocean currents."

As the reader must know by now, the **Flying Dutchman** is a legendary sea story involving a captain doomed to sail a sepre ship eternally.

Further research by naval authorities revealed that the submarine was of a class built in Germany in the 1930's, a type that reportedly carried some 200 tons of mercury as ballast. The situation took on a more complex proportion because of the emphasis on ocean contamination. The Food and Drug Administration had already set a mercury concentration of .5 parts per million as the danger level in fish and seafood.

Even as the troublesome situation was mulled over by officials, another government expert offered an explanation for the secrecy about the sub. Said he, "In the 1930's mercury was dirt cheap because there was a glut on the market. Today, well, it's not quite like gold, but it's still nice stuff to have."

He went on to say that mercury was quoted at New York (1971) for \$320 per 76 pound flask. Two hundred tons at that price would be worth about \$1.6 million.

So it would appear that not all treasure-laden sunken ships are old galleons and carracks lying among the reefs of the Gulf of Mexico, because now a mysterious sub drifts aimlessly about while divers ponder ways to get their hands on a valuable load of mercury without contaminating the ocean.

The sinking **U-166** lives in an eerie underworld, and who knows, maybe the ghost of her skipper still plots how he might get his revenge by casting his poisonous cargo into the warm Gulf waters in retaliation for the sinking of his submarine three decades earlier.

While the ghost submarine pursues her shadowy underwater course there is a story told of a 12,000 ton freighter bearing down on an English vessel. Those on watch on the Britisher were horrified to see the other vessel on a collision course with nobody on the bridge but a big, black dog. The dog allegedly started barking, and a man came up out of a hatchway in the nick of time to put the helm hard over and steer the ship free.

Now the reader knows what is meant by a "dog watch", at least the modern adaptation of same.

As intriguing as the **U-166** wandering in the depths of the Gulf is the unsolved mystery of the American tanker **Marine Sulphur Queen** which literally vanished without trace on February 3, 1963. Despite all of the modern communications, lifesaving equipment and aids to navigation available to mariners of our day, the mysterious incident which apparently claimed the lives of 39 crewmen and a tanker laden with 15,100 long tons of molten sulphur has been written in a ghostly hand—"lost without trace."

The **Marine Sulphur Queen** disappeared about 200 miles west of Key West, Florida and the only clues, if one could call them clues were some life jackets stenciled Sulphur Queen, a log megaphone and a crewman's jersey. These were recovered by the Coast Guard 15 days after the tragedy.

Built as a T-2 type tanker in World War II, the **Marine Sulphur Queen** was converted to a sulphur carrier in 1961, and on her fatal voyage had four huge metal tanks full of molten sulphur heated to 275 degrees F. by a network of coils connected to twin boilers.

Naturally, her demise centers around the cargo, for sulphur is inflammable, and produces hydrogen sulfide gas which is highly explosive. One of the few vessels of her kind, every precaution had been taken to make her as safe as was humanly possible, with emphasis on stopping gas from collecting in her tanks.

Still, all of the plausible explanations do not seem to be water-tight. Should gas have escaped from the tanks, it could have poisoned the crew before the alarm was sounded. A spark could have touched off the gases causing an explosion and that would have set the sulphur afire.

The Honduran banana ship **Platano** reported running into a odiferous sulphur smell, 15 miles off Cape San Antonio, the western tip of Cuba, just prior to dawn on February 3, but saw no ship—no fire—no wreckage—no bodies.

Absolutely no distress message emanated from the tanker. Ship's seldom go down that fast but the **Marine Sulphur Queen** must have been an exception. Others such as the Naval Collier **Cyclops**, as has been told, vanished without trace in those southern seas in the World War I era, and in December, of 1954, a converted LST named the **Southern Districts** vanished without trace, while traveling between Savannah, Georgia and the North Carolina coast. She like the **Marine Sulphur Queen** disappeared without trace—with her 23 crewmen. We hasten to say that her cargo was powdered sulphur, that substance that in certain circumstances can have the punch of TNT.

There have been numerous vessels in the history of our modern maritime commerce that have vanished, and though not as numerous as in the days before radio and radar, it becomes even more mysterious in our day as there are many more reasons why it should never happen.

The cold dark confines of Davy Jones Locker have many apartments never explored by any but the dead.

### TO BE CONTINUED

The next issue of the JOURNAL will carry stories about "unusual" ships that have been designed and built since the days of Noah and his Ark. We will also bring you Jim Gibb's collection of "Legends and Myths of the Sea" which I am sure you will find hard to lay down. Nautical Buffs will enjoy these stories published from the book... The Unusual Side of the Sea ... A Stop Chest of Sea Lore





  
**CANADIAN**

Department  
of  
Transport



*Radio Inspectors*

Radio Department

1918 1960

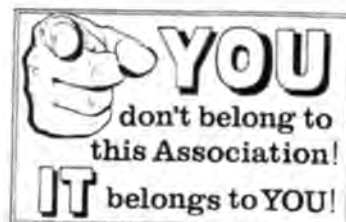
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| Argue, A.G.E.    | London, Ont.      |
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| Howard, W.       | Victoria          |
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| Maher, J.        | Halifax           |
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| Monday, B.       | Montreal          |
| Moore, W.J.E.    | Quebec            |
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| Richards, F.                          | Montreal (T)         |
| Robson, T.W.                          | Moose Jaw            |
| Sinclair, J.H.                        | Regina               |
| Slinn, T.                             | Toronto              |
| Smith, A.K.                           | Halifax (T)          |
| Spence, C.R.                          | Toronto              |
| Spracklin, C.R.                       | Halifax              |
| Stocker, A.                           | Halifax              |
| Stunden, W.G.                         | Calgary              |
| Tattersall, H.M.                      | Toronto (T)          |
| Williams, H.S.                        | Toronto (T)          |
| Wilmshurst, J.V.B.                    | Halifax (T)          |
| Yearwood, J.A.                        | Montreal             |
| Young, A.G.W.                         | Halifax              |
| Harrison, B.H.                        | Vancouver            |
| Martin, M.A.                          | Vancouver (D)        |
| Newcombe, H.R.                        | HQ Ottawa (Licenses) |
| Restall, B.A.                         | Eng. Tech. B.C.      |
| Sealey, F.W.                          | Victoria             |
| Stephen, J.C.                         | Moose Jaw            |
| Stephenson, W.W.                      | Engineer, B.C.       |
| Tee, H.D.                             | Supt. Sask.          |
| Bunt, R.                              | HQ (Interference)    |
| Caton, W.A.                           | HQ (Licensing)       |
| Cox, H.M.                             | HQ (Licensing)       |
| McOrmond, V.B.                        | Maritimes            |
| McWatters, J.J.                       | HQ (Interference)    |
| McWatters, R.                         | HQ (Exams)           |
| Rodgers, J.P.                         | HQ (Licenses)        |
| Later Supt. Alberta                   |                      |
| Walsh, H.E.                           | HQ Engineer          |
| Kitchin, J.E.                         | RI Vancouver HQ      |
| Supervisor Exams & Inspections. Later |                      |
| Supt. for B.C.                        |                      |
| Martin, M.S.                          | Vancouver (D)        |
| Thomas, D.R.                          | Vancouver            |
| Smith, N.J.                           | Vancouver            |
| Keller, F.H.                          | Vancouver            |
| Lathwell, H.T.                        | Vancouver            |
| Reid, L.L.                            | Vancouver            |
| (Interference)                        |                      |
| Sinclair, H.                          | Vancouver (Exams)    |

(T) TEMPORARY ( Usually operators on detail)  
(D) DECEASED ( as of 1960)  
-- James E. Kitchin, 84-SGP



"I CAN COPY THIRTEEN ITTY-BITTY WORDS A MINUTE."



"If you don't want any QRM from your XYL you'd better QRT, OM."

PORT O' CALL REVIEW

By - W5FIW

(Thanks to Bob Bowker 860-P)

And now---along comes the book "Ports of Call". I was so delighted I could'nt put it down until I had spent all evening with it. Bet I have gone through it five times looking up this and that of all the old time things I am so interested in. That book is a gold mine! I was absolutely fascinated with the Chapter on "The SOS/CQD Record". You know I could sure add to that chapter with some of the SOS's I handled. I see one there that I had alot to do with, the SS Grontoft which floundered 600 miles off Cape Race. I will never forget that experience. The others I handled are not listed namely - The SS Colthraps, SS Held, SS Romulus, just to name a few.

I am sure a lot could be added to that chapter...the sinking of the USS Allegheny and me having to jump overboard into the cold waters early one morning. No time for an SOS on that deal. That is enough of my experiences but I remember so many of the ships listed. To read a book like that is like living part of my life over again. I just loved it. I have heard of The Society Of Wireless Pioneers years ago, but have never had any connection with them. Sure wish I had. I see Skippers name listed in 1944, the only plane accident listed. Wonder how they ever got that info? Someday they will put out another book, probably listing more.

I just can't tell you how thrilled I am! It takes me back so many years and I really loved my merchant marine service, and my puny five years with the U.S.N in which I had inteded making a career. Only one question, how did you ever get a book like this? Do you belong to the SOWP?

Published - Circa 1904

The Story of the Pink Money of England

**33 Reasons**

of Holding  
**Marconi's Wireless Telegraph Company, Ltd.**  
The Original or Parent Wireless Telegraph Company of the World

and  
"Trading In"  
and  
"Trading Out"  
of the Market

Instead of Holding on to the Stock indefinitely and cashing in only the DIVIDENDS, the BONUSES, the RIGHTS and the SUBSCRIPTION PRIVILEGES

Published by  
**P. C. KULLMAN & CO.**  
The Wireless Brokerage House  
110-116 Nassau Street  
New York

WRITE for FURTHER INFORMATION

Compliments - Sam G.S. Corpe W6LM

The "Wireless"  
Our Proud Heritage!

 **DON'T JUST SIT THERE. WRITE AN OLD "BUDDY" - TODAY!**



# Crossing the Equator



An active period during the visit of King Neptune

## Impressions That King Neptune Made on a Wireless Man

### "Hi Jinks" at Latitude Zero

WE of the aging generation whose boyhood ambitions were fired by the fantastic narratives of writers, prefer to remember their romantic descriptions while we forget the hardships and privations that must have been undergone by their heroes and heroines. Even our own griefs and disasters become less memorable as the years pass. The pleasant things of life are far easier to remember than the unpleasant. Thus it is natural that the romance of the old sea tales should linger in our memory long after the hardships are forgotten.

We must not forget, however, that sixty years of steam navigation have greatly altered the character of sea travel. No longer are voyages entirely dependent upon the vagaries of ocean winds. No longer are voyages unduly delayed by adverse gales and long-protracted calms. Sea-going is now a business, an affair of furnaces and boilers, of engines and propellers. Voyages are matters of such definite calculations that the date of arrival can be predicted with accuracy before the vessel sets sail.

Yet there are some incidental features of the old-time deep-sea life that have survived. Here and there, in over-sea journeys to the antipodes and such distant parts, a few events crop out that hark back to the days of the old square-riggers and their clouds of billowing canvas.

One characteristic observance of the old-time sailors has survived the decadence of the others. This is the peculiar ceremony held on shipboard during the crossing of the equator, when all sea-going novices, and all "land-lubbers"—often including the passengers—who have never passed at sea from the northern to the southern hemisphere, or vice versa, are introduced to King Neptune and his court. The event is a seaman's frolic, projected and carried out by the crew, with the consent and assistance of the officers. Originally it was intended for the initiation of sea-going apprentices, and sailors who had never before "crossed the line." During recent years, however, large passenger steamships have been employed in antipodean voyages and in cruises around the world. Upon these ships there have been hundreds of cabin passengers, whose interest in this unique sailors' prank stimulated them to partic-

ipate in it. At first the participation of passengers came from their own initiative and request. The sailors took no liberties with the passengers and went no further than the passengers themselves desired. But the latter looked upon the affair as no end of a lark, as a chance to play jokes upon one another, as a diverting incident in a long and otherwise uneventful voyage, until now passengers as well as sailors and wireless men are regularly initiated and welcomed to his domain by King Neptune as a matter of course.

Previous to the inauguration of the ceremonies a large, water-proofed canvas tank has been rigged up on deck, with a "boatswain's chair"—minus a back—fixed at its forward end. This is filled to the depth of three or four feet with sea water, and in it, during the ceremonies, stand two burly minions of his nautical majesty. The purpose of the tank and the offices of these satellites will be disclosed later.

In the meantime one member of the crew has been chosen to represent King Neptune, being made up in crude fashion with royal robes, a crown and a long beard—the latter being usually constructed out of oakum or rope yarn. His Consort, Queen Prosperine—another of the crew—is appropriately clothed as befits her station, and her long flaxen hair is also of oakum. There are various court attendants in fantastic garb, among whom the royal barber occupies an important position.

Upon the day of crossing the equator, before the ceremonies begin, those who are to undergo the initiation are gathered together, and told to prepare themselves for the trial, which preparation consists principally in putting on some of their old clothes—as few as possible—and those that water will not injure.

At the beginning of the ceremonial, Neptune and his court appear on deck and take their places at the opposite side of the open space before the great canvas water tank, at the end where boatswain's chair has been rigged, king seating himself upon his throne, the queen placing herself beside him. court attendants group themselves either side. (In the old days Neptune and his court always boarded the vessel over the side, but this part of the royal arrival has been moderated and is frequently omitted on modern steamships.) The court herald announces that his royal master has learned that there are on board a number of culprits who have invaded his domain without his royal sanction, and these are ordered before his majesty in order that proper punishment may be meted out to them, and that they may be duly initiated, and later accepted as his subjects.

The row of victims is lined up before the king, who addressed them, asking them why they came to sea and why they have invaded his dominions, and finally sentences them to be shaved by the royal barber, and also to undergo other attentions at the hands of the two strapping attendants standing waist-deep in the canvas tank.

The first-selected culprit is seized and dragged to the chair, into which he is thrust with no gentle hand. The barber's assistant, armed with a huge paste brush and provided with a bucket of lather—in these days and in the case of passengers it is made of soap, but once upon a time and in the days of sailing ships it was composed of that unsavory compound known as "slush"—daube the face of the victim all over, not forgetting to cover up his eyes and fill up his ears and, if possible, his mouth. The barber seizes the victim by the hair of the head, and proceeds to shave him with a large wooden razor, or saw-edged cleaver. The operation is artistically and quickly done, though not delicately. Then the barber or his assistants grasp the victim by the legs and dump him over backwards into the canvas tank, where he is instantly seized by the two attendants who have been waiting for him, and by whom he is soused three times under water. If the

initiate takes his sousing philosophically and does not struggle, the immersions are quickly over, and he is released and allowed to scramble out of the tank amid the laughter of the lookers-on. If he put up a resistance, however, all the worse for him. The two attendants have been selected for their ability to accomplish what they are expected to do. Resistance is futile, therefore, and only prolongs the infliction.

The first victim out of the way, the next is brought forward, to undergo the same treatment, and so on until the list is completed. The king and court afterward take their leave, first having held a reception during which they welcome the initiates and wish the captain a prosperous voyage.

Ladies among the passengers are usually exempt from the ceremonies attending the crossing of the equator, but occasionally some of them elect to be initiated. These self-chosen victims thereupon undergo the same treatment allotted to the male contingent, but it is usually noticeable that the royal barber and his associates do not handle them with any unnecessary roughness.

Upon some modern passenger steamships in recent years that have been engaged in vacation voyages, the passengers have not been satisfied with the old-time observances of crossing the equator, and have introduced some modifications of their own. These are usually in the nature of "horse-play," and, while they are frequently very diverting, they are examples of spontaneous gaiety rather than any real part of this unique and time-honored marine pageant. For instance, upon an American steamship which has made voyages through the Panama Canal and down the west coast of South America, passengers had the hose laid which is used to flush down the decks of the ship, and went about with this, seeking unsuspecting victims upon whom to turn a stream of water. In this pastime they did not give their victims any warning or any opportunity to prepare for the infliction by a judicious selection of clothing. They caught them as they were, and wherever they happened to be on deck—whether asleep in a steamer chair, alone in some quiet corner absorbed in an engrossing book, or in a small group engaged in intimate converse. All, alike, were soused, and all, alike, fled shrieking from the unexpected drenching. It is only fair to say, however, that in the tropics the temperature of the water is too agreeable to make even an unexpected drenching objectionable, and when all are subjected to it indiscriminately, few are likely to take serious offense at the infliction.



Reprinted from . . . .

"THE WIRELESS AGE"

February - 1917





# "Iron Bottom Bay"

## SAGA OF THE U.S.S. ALUDRA



This is a brief saga of the short-lived USS ALUDRA to which I was assigned as one of the radiomen. It may be of interest to members.

I joined the U.S. Navy on October 12, 1942 and received my boot training at the Great Lakes Naval Training Center. Because I had previous experience as wireless operator on merchant vessels, I received a radioman's rating and soon found myself along with thousands of other sailors bound for the west coast and the Navy's Treasure Island. Here we received further training.

It was at San Mateo, where a group of us trainees were firing 10m anti-aircraft guns, when one of the guns exploded. A couple of us were injured - my buddy seriously in his right arm and I caught a shrapnel just above my left eye. We had a fast motor escort back to the base. Fortunately for me, mine was not very serious, but my buddy had a longer stay at the hospital.

My assignment as radioman to the USS Aludra came very soon after this horrible experience.

The Aludra was a Kaiser-designed, Liberty-type ship which was commissioned in late 1942 at San Francisco. The crew went aboard the day after Christmas, 1942 for a shakedown cruise. Very soon after, we left the Golden Gate loaded down to the gills with high octane gas, ammo and other supplies for use in the South and Southwest Pacific fighting areas.

It wasn't but a few days out, that a fire broke out in our engine room. Luckily it was extinguished soon, otherwise I would not be here writing this letter, hi! The rest of the long trip was uneventful except for General Quarters and briefing drills.

We skirted the American Samoas and reached our destination at Noumea, New Caledonia, headquarters of the South Pacific Command. We were then diverted to Auckland, New Zealand and where we discharged our initial supplies.

After a short stay at Auckland, we touched at Brisbane in Australia for a load of medical and other supplies and were bound for the war zone of Guadalcanal where we were very fortunate to unload our precious supplies. However, on our way out, the Aludra was one of three other supply ships under Destroyer Escort and under strict radio silence, when on the morning of June 25, 1943 and at about 0330 the USS Aludra, along with a second sister ship, were hit by torpedoes. We later learned it was a one-man Japanese submarine that scored the hit.

I was on duty at the time and copying the 'Fox' broadcasts at 20 to 25wpm just as all U.S. Naval ships did. All of a sudden we felt a muffled thump and a strong bit of vibration - instantly we were listing to port. Shortly we heard the Captain's voice saying "All Hands Abandon Ship!" I found myself giving a hand to the ship's doctor in hastily securing some medical supplies. Most of us were fortunate in getting off into motorized life boats and rafts. There were some casualties.

We were in the water for several hours. Some were picked up by the destroyer, some by the other surviving ship and some by a friendly small boat which shuttled between the islands with supplies. I was on the latter and in full view of all the surviving crews when about 0930 that morning we witnessed a most impressive and unforgettable sight. Our Destroyer Escort had to 'finish off' the Aludra with gun fire because she had only partially submerged. She met her fate as so many other ships did in the Coral Sea area known as the Iron Bottom.

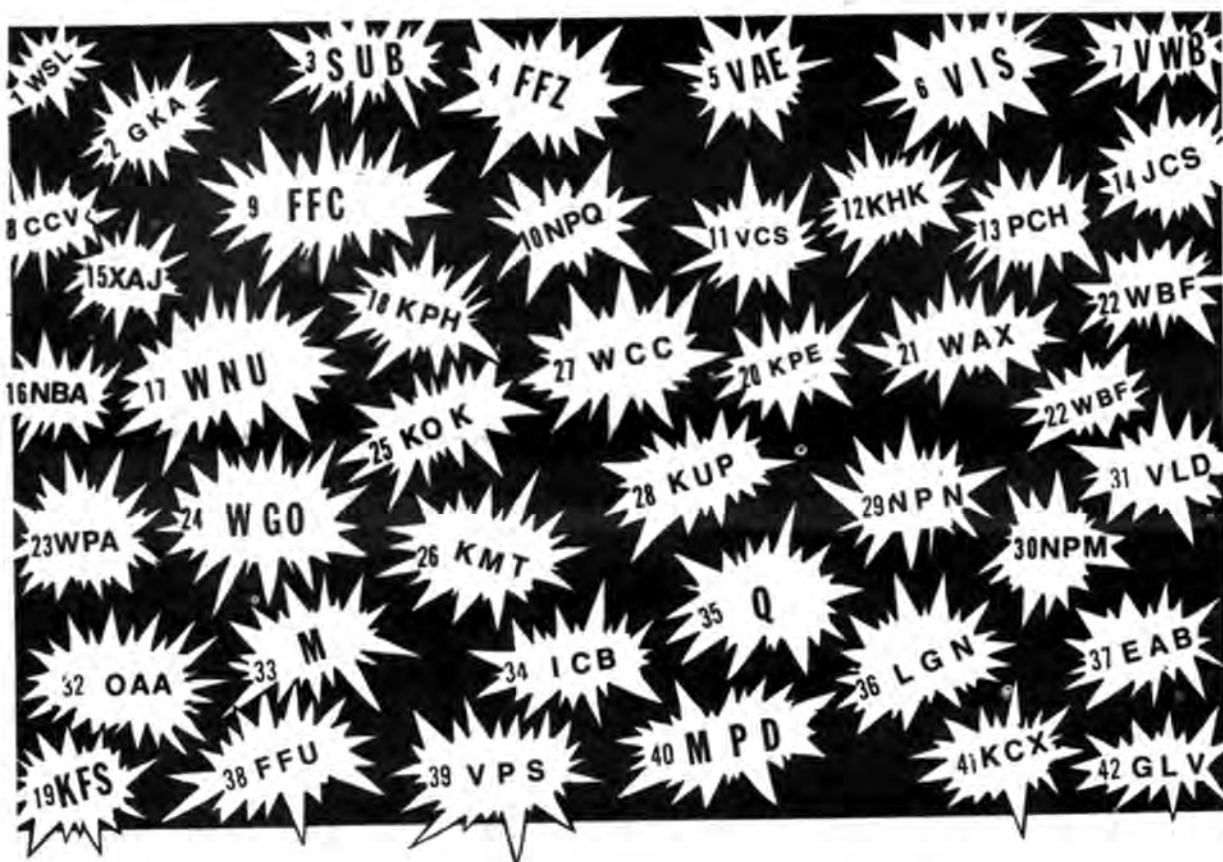
When we were assembled and re-grouped on the northern end of the island of New Hebrides at Espiritu Santo following the losses, we were sent several miles south for a short period of rest. Some were then sent back to the States while others were given re-assignments to other ships and stations. I was assigned as radioman to the USS Medusa (AR-1)/NEMC, a submarine tender in the nearby waters. She had a fine reputation for her gallant fight at Pearl Harbor on the infamous day of December 7, 1941. But then, that is another story!

Nestor J. Boruch, 1689-V (W4CH)



## How Many Calls Can You Identify ?

Mix a little 'levity' with your longevity. Without looking at the answers which you will find on Page 28, see how many you can jot down and correctly remember. Of course calls have changed through the years and the 'time frame' for most of these would be in the 1920-30's. If you get ten, you're still pretty sharp. If you get twenty correctly, you are a real pro. If you get 30 ... no doubt you have been ATW (around the world) many times (E-W or W-E). If you get 40, you have worked both high-power, marine and navy bands plus ATW many times. If you get them all, you are either a "whiz kid" or a Five-Star prevaricator, magna cum laude.



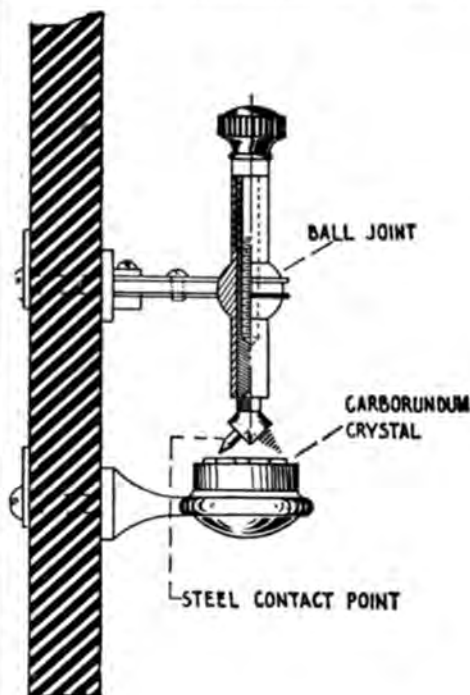
Find Answers on Page 28





# The Story of Detectors

By - Herbert J. Scott



## The Hertz Resonator

In the beginning there was a circular loop of wire. In its circumference was a tiny gap. Heinrich Hertz energized his small laboratory transmitter of electromagnetic waves. When he did, a tiny spark jumped across the wee little gap when the loop was a short way from the transmitter. What a triumphant thrill this must have been to Herr Doktor Hertz to see this tiny spark - confirmation that electromagnetic waves were propagated through space!

This extremely simple device appears to be the first man-made detector of electromagnetic waves which we today call radio. Insensitive, true; range, very limited, true; but it WAS an indicator, a device of extreme simplicity, capable of detecting the presence of an electromagnetic wave of sufficient magnitude impinging upon the loop!

Following this history-making discovery of Hertz, many workers both abroad and in this country turned their efforts to devise a more responsive device for detecting the presence of such a wave.

## The Coherer

The first development of a more effective instrument was a device called a coherer. This seemingly was originally suggested by Edouard Branly, a French physicist and mathematician in 1892.

The coherer consisted of a small pile of metallic filings, finally a mixture of about 96% nickel and 4% silver, in a glass tube. Metal plugs in each end made contact with the filings.

When a radio frequency current flowed through the circuit embodying the coherer and a local battery, it caused the metal filings to 'cohere' thereby decreasing their resistance. The result was an increase of battery current flowing in the circuit. However, in order for the coherer to be responsive to a following wave train, it had to be 'decohered', that is the filings had to be restored to their original highly resistive state by being shaken apart. This was accomplished mechanically by using the clapper of an electric bell to tap the glass tube.

The original coherer by Branly was improved upon by various workers, notably, Lodge, Popov, and particularly Marconi. Marconi used a smaller tube along with a more sensitive indicating device than had been used before by other workers. The current required from the battery by Marconi's coherer was of the order of one milliampere.

An improvement on the coherer was claimed by Sir Oliver Lodge and Dr. Muirhead of London in 1902. They describe their device as consisting of a thin steel disc which was slowly revolved by a mechanical clockwork. The rim of the wheel dipped into a small pool of mercury held in a metal cup. The wheel was adjusted so that its rim just barely touched the surface of the mercury.

## Electrolytic Detector

Not long after Branly's coherer had been made use of by Marconi and others, Professor Fessenden in 1900 invented his 'liquid barretter' which more popularly became known as an 'electrolytic detector'. This device was essentially a small graphite cup containing a dilute solution of either sulphuric acid or of nitric acid. Into this dipped a very fine wire which was frequently of platinum just barely touching the surface of the liquid. The adjustment was critical and was adversely affected by a strong signal or by vibration, the latter problem being quite severe aboard ship. It was, however, a device which was much more sensitive than the coherer, and in addition it reproduced the spark tone of the transmitter in the headphones, which the coherer could not do.

This detector got me into big trouble as a young lad in 1912. I was trying to use one in my wireless receiver (a coil wound on a Quaker Oat box). My source of electrolyte was some dilute sulphuric acid filched from a storage battery. Unobserved by me, or perhaps even ignored, some of the electrolyte spilled on the floor. By the time my mother discovered it, there was quite a hole in the carpet. This almost put an end to my wireless activity right then!

## Magnetic Detector

It was in June 1901 that Marconi patented his magnetic detector in the United States. This device was an outgrowth and extension of some work done previously by Professor E. Rutherford.

This detector consisted of a number of fine, insulated, iron wires twisted into a thin cable and stretched in the form of an endless belt over a pair of pulleys spaced a small distance apart. One of the pulleys was driven by a clockwork mechanism so that the stranded belt rotated with a linear speed of about four feet per minute. The belt passed through a glass tube on its continuous journey around the pulleys.

Over this tube was wound a coil through which the radio frequency current flowed. Wound over this coil was another coil which was connected to the headphones.

Two horseshoe magnets were placed astraddle of the coils and with their magnetic poles in opposition, adjacent to one another and in close proximity to the rotating strand of iron wires. Their purpose was to produce a fixed magnetic bias.

When a radiofrequency current passed through the inner coil, a sound was heard in the headphones connected to the outer coil. The tone of the signal heard corresponded to the spark frequency of the transmitter.

This detector though rugged and reliable so long as the pulleys continued to move the bundle of fine wires through the coils, was of rather poor sensitivity. Occasionally the clockwork spring would break and it was common to hear the receiving operator tell the transmitting station to "take it easy, I have to crank Maggie by hand".

## Crystal Detector

General Henry Dunwoody of the U.S. Army discovered in 1906 that a carborundum crystal could be used as a detector of wireless signals. And with this disclosure - the crystal detector was born!

Of course, as with any new activity, many people following the General's disclosure soon indicated that there were many other crystals which under proper conditions could also be used as detectors. One of these whose name was well known in the early years was Greenleaf W. Pickard who devised what he called the 'perikon' detector. This detector was composed of two dissimilar crystals in contact with each other. Among the most popular crystals with the operators of those days were galen, silicon, and iron pyrites. In those days of spark transmitters and crystal detectors, great arguments could be heard emanating from the 'static room' of the wireless operator's hiring halls putting forth the relative virtues of one crystal over another.

## Fleming Valve

Professor J. Ambrose Fleming, a member of the faculty of the University of Nottingham where he taught physics and mathematics became quite interested in the Edison effect. It might be recalled that Dr. Fleming was one of Marconi's engineers who was concerned with the design of the transmitting station at Poldhu from which the first signals were sent across the Atlantic Ocean in 1901.

In his studies of the Edison effect, Dr. Fleming realized that here was a device consisting of a heated filament and a small metallic plate inserted inside the evacuated bulb housing the filament which seemed to possess the property of unilateral conductivity, necessary for detection. So, ergo, here was a device which would work as a wireless detector! It did, and on the 19th of April 1905, Dr. Fleming was granted a patent on his 'valve' as he called it and which we know today as a diode. It was some little while before the device was commercially used, partly because it was somewhat ahead of its time and partly because of some patent licensing problems.

## The De Forest Audion

With the advent of De Forest's 'audion' which you know consisted of Fleming's diode into which had been inserted a third element or grid as it was called, numerous types of detection coupled with amplification were developed.

We must not forget the heterodyne detector devised by Professor Fessenden many years prior to the audion of De Forest. It was the audion, or triode as we call it today, that made a most practical device of the heterodyne detector.

## The Tikker

When Valdemar Poulsen invented the arc transmitter, a new detector for these continuous waves had to be found. The detectors used for the reception of spark signals simply would not work on the arc cw signals.

Two devices were used at first to make these signals audible to the receiving operator. These were the tikker and the Goldschmidt tone wheel. The tikker was developed by L. W. Austin and was rather widely used in many of the arc receiver installations. The tone wheel might be considered an improvement over the tikker and was rather elaborate in nature.

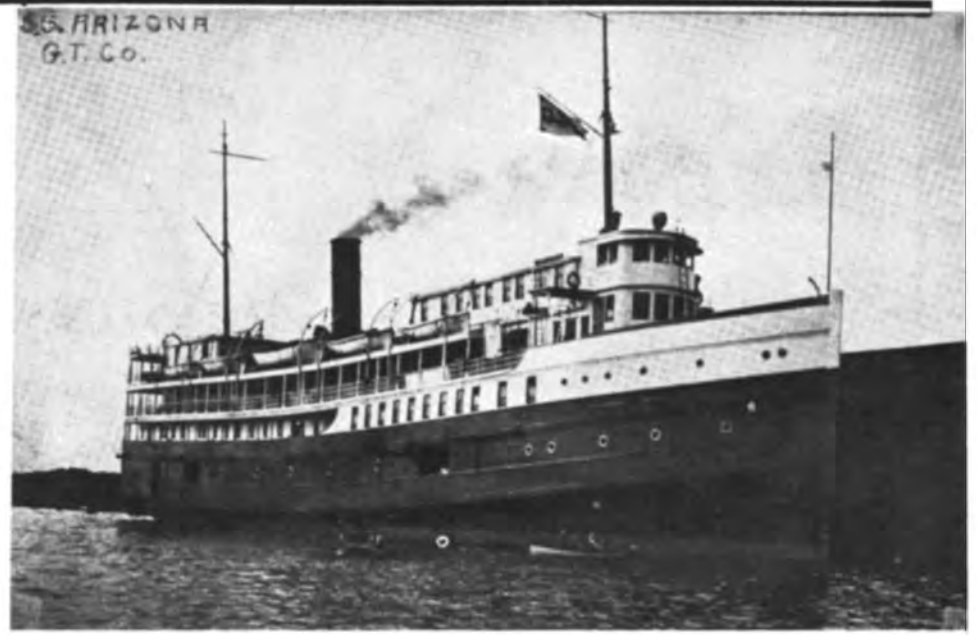
The tikker was essentially a circular metal wheel, rotated at a moderate speed. Upon the periphery of this wheel rested a stationary catwhisker sort of wire. As the wheel revolved, the catwhisker chattered up and down alternately making and breaking contact with the wheel. This broke up the wave train and produced an audible noise in the headphones. It was rather an unpleasant, scratchy sort of sound to listen to but the device was rugged in operation and relatively inexpensive.

## Goldschmidt's Tone Wheel

The Goldschmidt Tone Wheel also depended for its operation on breaking up the wave train. It consisted of a wheel constructed like the commutator of a d.c. motor. It was equipped with a couple of brushes for contact with the segments of the wheel. This wheel rotated at a rather high rate of speed and was equipped with a speed control so that the audio note in the headphones could be varied to suit the operator.

(Continued on Page - 28)





Excursion Steamer ARIZONA sailed the Great Lakes from Chicago. Member R.G.H. "Matty" Mathews was Chief on her for a long time. (Call "PQ"/WFI.)



VERN BORG-1020-P. Aboard the SS Nishmaha/KEVM, with Lykes SS Co. Enroute New Orleans to Bremen, Germany, 1931. What is more beautiful than a bungalow on the boat deck?



Ray L. Bowers 1369-P



R.H.G. "Matty" MATHEWS  
Aboard SS City of Chicago, 1912-1914.  
Now lives in Ajijic, Mexico.



SOWP member Donald K. de Neuf (117-SGP) receiving HOUCK AWARD for 1978. Award was presented by Robert M. Morris (W2LV) TA-11 (right) on behalf of AWA at their fall meeting.



Ellis H. Smellie 2650-S/SGP  
Taken circa 1914 at Victoria, Australia.

# picture page



SOCIETY OF WIRELESS PIONEERS

NOTE TO MEMBERS. We need pictures—please send pictures of yourself, your ship, or anything of real interest for these pages.





# S.O.W.P. IN PICTURES



FIRST PICNIC OF THE WIRELESS PIONEERS—1968. Frank Geisel (Membership Chairman), left, and Bill Breniman (Executive Director), right. The "FIRST" edition of

"PORTS O' CALL" had been printed. It has long since become a collector's item. Picnic was on the grounds of the late Captain Dollar estate in Walnut Creek, California.



Mascot of Ops on the SS EMMA ALEXANDER/KKEE in 1928. "Jerry" Zobel 788-SGP, called "CQ" for short (Sea Canary to you landlubbers). Member Earl Thomas 1308-SGP was with Jerry on KKEE.



Member E. W. Cushing on watch at WYC (Langley Field, VA.)  
Circa 1927



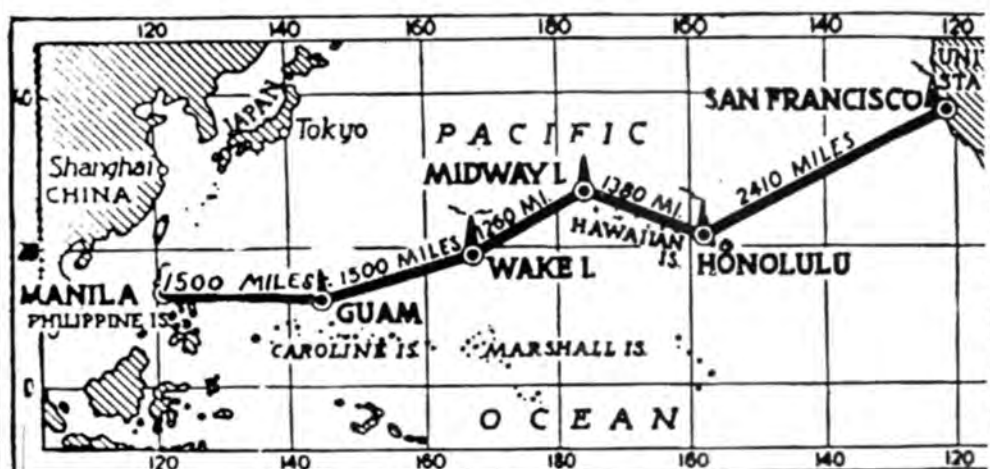
Henry "Hank" Drane 1037-V  
Aboard the SS Monterey/WECW 1928



Embarkation Point for many an 'Op'  
64 Broad Street, New York



## Route of the "China Clipper"



## HONORING...

## WILSON "TURNER" JARBOE JR.



Wilson Turner Jarboe, Jr. at radio set, Auckland, New Zealand.

wrote, "This is the zero hour. The old Jarboe bluff hasn't failed me yet—keep your fingers crossed." I guess it didn't, because on March 17, 1937, Captain Musick and his crew of six set the Pan American Clipper down in Auckland, New Zealand, blazing a 7,000-mile trail from San Francisco. When Jarboe took the assignment, he thought he would be gone six weeks—that six weeks expanded to six months. When he returned he found me packed, for I had heard via the grapevine he was to be sent to New York and I had no intentions of his going alone.

His first assignment in New York was to put in a flying boat station at Port Washington. After a year there, he was sent to Dundalk, Maryland, just outside of Baltimore, Maryland. There he put in another Pan American radio station. It was there, in 1938, that our daughter, Joan, was born. In 1939, he was grounded for good—the fun went out of his job, for he was "earthbound."

During the war, he was a Lt. J.G. in the Navy Reserve. On November 9, 1953, he resigned from the U. S. Naval Reserve.

Pan American was originally in Long Island City. We lived on the island and he went to work there. When the new Pan American building was occupied in March of 1963, he moved his office into the new building. He remained there until his retirement in 1972, at which time he was communications administrative assistant to vice president Waldo Lynch. He lived in Rogers, Arkansas, from 1972 until July 4, 1978.

\*\*\*



Historic Date — November 23, 1935. The China Clipper arriving at Pearl Harbor.



Picture of the China Clipper a few minutes after "take-off" flying over the then-unfinished Golden Gate Bridge enroute the Orient on its epic flight.

## Life with Turner

BY JANE JARBOE

Wilson Turner Jarboe, Jr., was born January 27, 1907, in Winfield, Maryland. His father was a circuit-riding Methodist minister. He lived and attended school in Baltimore, Maryland. In July 1925, at the age of 18, he signed on his first ship, the S.S. Peter H. Crowell, a foreign steamship, as a radio operator. He continued on foreign lines until July 1929 at which time he signed on the S.S. Julia Luckenbach, an inter-coastal line between New Orleans and Seattle, Washington. I met him in November 1929 in Seattle, Washington. He left the Luckenbach Line in August 1930. He joined Pan American World Airways on October 16, 1930.

The Pan American Airways Corporation was formed October 3, 1927. They had U.S. and Cuba mail contracts. The contract called for a first flight by October 19. That requirement was met, and by October 28 scheduled service was in full operation. When Jarboe joined the company three years later, they were well on the way to establishing routes across the Latin American countries. He was young, single, had a first-class radio license—and was willing to travel. He retained a room in Hialeah, Florida, and became their "radioman-at-large." That is to say, whenever anyone stationed at a refueling station was on vacation, Jarboe replaced him. In those days, a refueling station was a thatched hut and a gas tank. Often he would go from one station to the next and months would pass before he returned to Miami. He told many tales of a native chasing the buffalo out of a stream so he might bathe, or of a perforated oil drum in a tree—filled with water by a little native boy; or how each morning a boiled egg, wrapped in leaves, was served him for breakfast. He never asked where it came from, simply paid the native a few pesetas, or whatever; or how when flying over the Inca ruins in Peru, the native men would shoot arrows at the "Big Bird" while the women fled to their huts.

Latin America being pretty well established, Pan American set their sights on conquering the Atlantic and Pacific Oceans. See enclosed flight reports.

After the North Atlantic trip, he returned to Miami and continued on the Latin American flights until he was transferred to Alameda, California, to begin the survey flights across the Pacific. He made all of the survey flights in preparation for the official flight of the China Clipper on November 22, 1935. See log of flight.

I left Seattle and was then working in the Bay Area. Several times while he was on flights I had taken out a marriage application only to have them expire before he returned. Or when he did return, another assignment awaited him. Finally we did get married in February 1936, but he was due to make yet another trip. On December 8, 1936, he sailed on the S.S. Niagri for Auckland, New Zealand, where he went to install the radio station that was to receive the Clippers from San Francisco to New Zealand. That was a big responsibility. In a letter just before he left Honolulu, he



Left to right—V. A. Wright, F. A. Noonan, Capt. E. C. Musick, R. O. D. Sullivan, C. D. Wright, George King, Max Weber, T. R. Runnels, W. T. Jarboe

## Crew—China Clipper

THOMAS R. "RAY" RUNNELS

SOWP Member - 909-P was also assigned as R/O on the China Clipper. Regretfully, he was 'pulled' at the last minute to make room so added mail would not exceed weight limit.

(He appears, second from right)



# NORTH ATLANTIC SURVEY

—WITH—

## COLONEL CHARLES A. LINDBERGH

MY PERSONAL IMPRESSIONS, THOUGHTS, AND RECORD OF THE VOYAGE OF THE S/S JELLING/OYKC, A DANISH TRAMP STEAMER, INTO THE WATERS OF NEWFOUNDLAND, LABRADOR, GREENLAND AND ICELAND. THIS VOYAGE WAS FOR THE PURPOSE OF COLLECTION DATA IN RELATION TO A POSSIBLE FUTURE AERIAL ROUTE TO EUROPE FROM AMERICA, AND TO SERVE AS A SUPPLY SHIP FOR COLONEL CHARLES A. LINDBERGH ON HIS FIRST NORTH ATLANTIC SURVEY FLIGHT.

WILSON TURNER JARBOE, JR. (RADIO OFFICER)

June 28th, 1933

THE NORTH ATLANTIC SURVEY VOYAGE OF THE  
S.S. JELLING-OYKC  
JUNE 28th, 1933 to SEPT. 4th, 1933

June 28th: The Pan American Airways party, consisting of W. T. Jarboe, Jr., Major R. A. Logan, Dr. Warren Duffield, and H. H. Homan departed from Philadelphia aboard the S. S. JELLING, a Danish tramp steamer, the crew consisting entirely of Danes. The crew spoke no English, none of the party spoke Danish. It was not until we were well on our way that it was discovered the old ship had no heating system.

The purpose of the voyage was to collect data and information to evaluate plans for establishment of a future aerial route to Europe from North America, and to act as a supply ship for Colonel Charles A. Lindbergh on his survey flights. No one knows our destination, orders simply read "Steer Northeast until advised otherwise by radio."

July 1st: A message from New York, via Miami, informed us the first port of call would be St. John's, Newfoundland.

July 5th: Today at 10:05 a.m. we arrived at St. John's, Newfoundland.

July 6th: Departed St. John's about 4 p.m. bound for Cartwright, Labrador, where we will await arrival of Colonel Lindbergh. We are now in the fog and ice belt. Many icebergs are sighted and fog plagues us constantly.

July 8th: My whole day was taken up with radio bearings and ice reports. Called in to Battle-Harbor to try to get an ice pilot to take us up the coast, but the only available man was the manager of the local canning factory and he would not leave the harbor, so we proceeded on our way without any pilot.

July 9th: The fog still holds, not much progress.

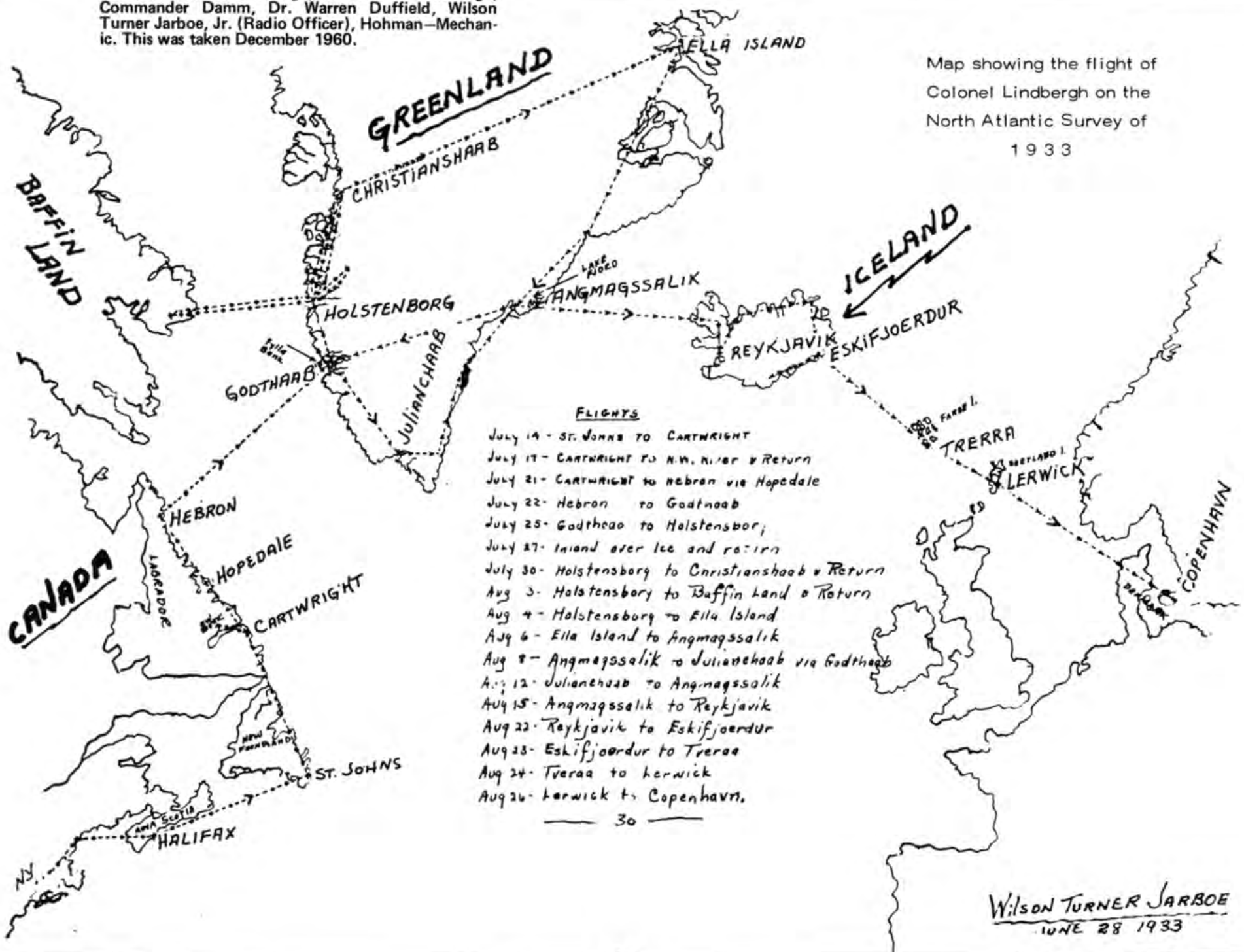
July 10th: The fog cleared shortly after noon, just in time to make Greedy Island and pick up a local wiseman who acted as pilot to Cartwright. Here we will stay until Colonel Lindbergh arrives. As yet we have no knowledge of his whereabouts, nor how long we will have to wait for him. The yacht Alice is anchored a short ways from us and is serving as a mother ship for the Italian squadron of 24 planes which are in Reykjavik, Iceland, awaiting favorable weather conditions for their hop across Southern Greenland.

July 11th: Anchored in Cartwright, Labrador, and it seems as though we will probably remain here for at least a week. The Italian squadron was supposed to leave Reykjavik, Iceland, today, but have been delayed because of bad weather over Greenland. Various reports have been received as to the whereabouts of Colonel Lindbergh.

( CONTINUED ON PAGE 30 )



Atlantic route survey - Reykjavik, Iceland, 1933. (L/R) Charles A. Lindbergh, Ann Morrow Lindbergh, Commander Damm, Dr. Warren Duffield, Wilson Turner Jarboe, Jr. (Radio Officer), Hohman—Mechanic. This was taken December 1960.





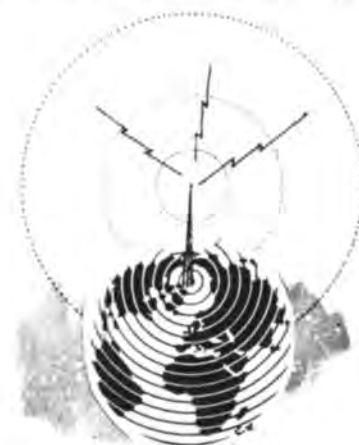


BOOK OF THE "WIRELESS PIONEER"

# - Chapter Directory -



The 'Get-to-gether' Society



## Chapter Directory

### CHAPTER DIRECTORY LEGEND (ABBREVIATION OF OFFICES)

D	Chapter Director	CHOP	Chief Operator/Chap.
AD	Assistant Chapter Director	H	Chapter Historian
S	Chapter Secretary	C	Chapter Curator
T	Chapter Treasurer	M	Membership Chairman
S/T	Secretary-Treasurer	E	Editor, Chapter N.L.
PC	Program Chairman	AR	Area Representative.

### CHAPTER I - GOLDEN GATE

Northern California, Western Nevada.

FRED B. MANGELSDORF - (D-S/T) W6ZK  
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### CHAPTER III - DOCTOR LEE de FOREST

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CHARLES D. MORRISON (D-S/T) W6VI  
2034 Del Rosa Drive, Los Angeles, CA 90041. (213/256-0842)

### CHAPTER IV - STAR OF INDIA

San Diego County - North to Dana Point and N. of 395 to Riverside and East to Yuma.

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(S) FELIX FERRANDO, (T) EUGENE ZALUSKEY

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CAPT. VIGGO H. "EBY" CONRADT-EBERLIN WA7CJV  
1721 N.E. Ravenna Blvd., Seattle, WA 98105. 206/525-9353  
(S/T) THERON C. "VAN" VAN PATTEN (H) Dr. ERSKINE H. BURTON  
(CHOP) TOM A. JOBS/W7TU.

### CHAPTER VI - GUGIELMO MARCHESE MARCONI

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(Mr. "Bill" Filtness is also AREA DIRECTOR - CANADA)  
(S/T) WILLIAM P. "BILL" CORSON VE7PC

(Note: Many members in Washington & B.C. hold dual memberships in Chapters V and VI which is encouraged).

### CHAPTER - VII - THOMAS A EDISON \*\* SEE NEWS NOTE

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1630 Venus St. Merritt Island, FL 32952.  
(S) WILLIAM E. ALEXANDER W4GXL

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(T) EDMUND SENUR.

(Due to eyesight problem, Director Aherns is requesting volunteers to assist with chapter activities - please help).

### CHAPTER IX - ARIZONA - SOUTHWEST

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(T) DONALD B. MASTEN SR. W2LEL. Newburgh NY. T: 914/565-2693.

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Chapter launched July 22 1978 at Flamingo Chuckwagon. A very fine 'get-to-gether'

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(S/T Pro Tem) IZZ KANDEL

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1336 HICKORY ST., Waukegan, IL 60085

(Chapter is being formed, Contact Paul who is Organizing Chairman)

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CORNELIS "COR" GLENURN (D-S/T) PAØGL Nieuive(3616 Kerkplein 29, Schore 36 (Zeeland) Netherlands/

#### EDELWEISS CHAPTER ( SWITZERLAND)

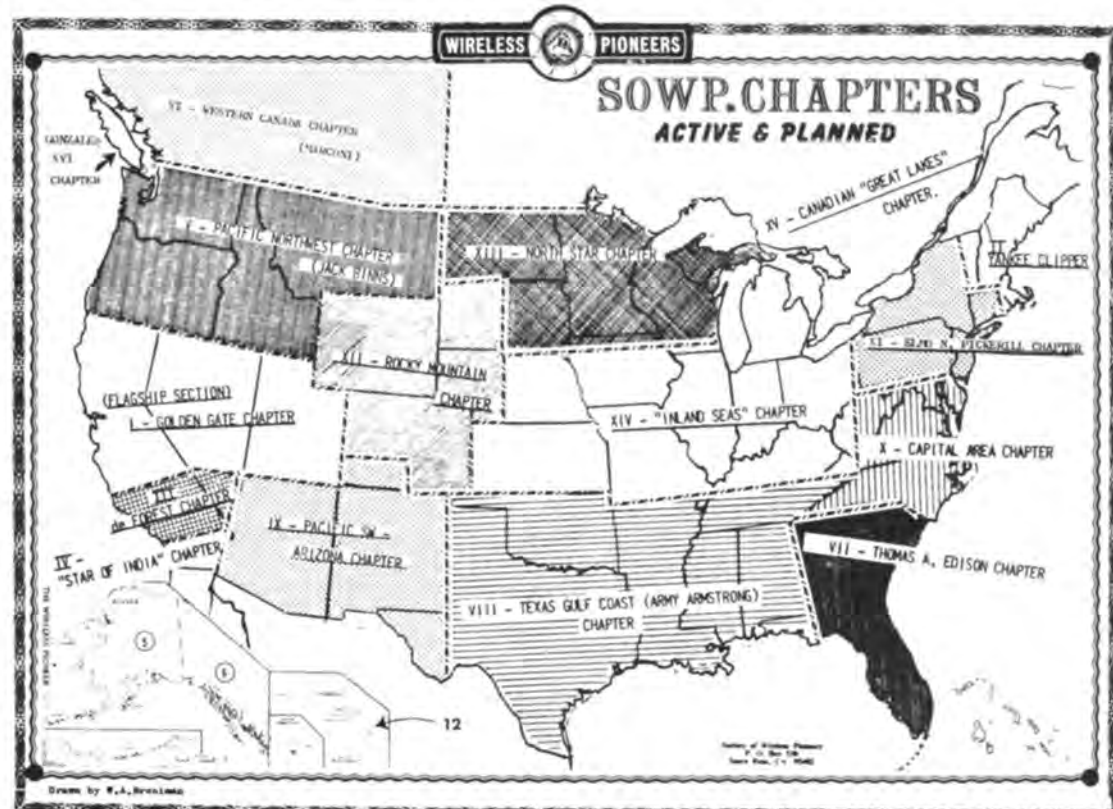
ERIC WALTER (D-S/T); Bucklerstr. 20 8181 Hori, Switzerland. (T: 01 96 0754

#### SOUTHERN CROSS - AUSTRALIA-NEW ZEALANDS & ISLANDS

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WM J. "BILL" O'BRIEN (AR) 45 Murray St. Pymont NSW, 2009 Australia. T: 560-6144.

**CHAPTER VII NOTE:** Suggestion has been proposed by VP William Willmot to reorganize the EDISON CHAPTER with AREA CHAPTERS in Tampa/St. Pete (Edison) area (2) East Central Fla (Canaveral Chapter) and (3) Miami/Ft.Lauderdale Area (Gulf Stream Chapter). We suggest you contact "Bill" Willmot on the above. THE EXISTING SOWP EDISON NET to be renamed the SOWP FLORIDA NET. The above suggestion will give all Florida members better opportunity to get to gether for reunions without long haul travel.







U. S. Coast &amp; Geodetic Survey Ship Surveyor

## JOHNNY PEEL MIXED DEEP SEA SOUNDINGS WITH AMATEUR CALLS

### 1940 VOYAGE OF THE USC&GS CUTTER SURVEYOR

By JOHN PEEL

**I**t all started like this--I have always liked to read about the experiences of other Hams that travel and of expeditions and such articles in QST. It so happened that I made a 6-months' trip to Alaska in 1940, so thought I would relate my experiences of Hams met and of all of the radio gear I saw and used when on this trip.

In February 1940, after having been laid off at the railroad shop where I work in Portland, I decided to go to Seattle to see if I could find a job, as a lot of times if a fellow goes some place else he is lucky. I thought possibly I might get a job in an Alaskan cannery.

I had let my former second class commercial ticket run out, and never dreamed I would later be on my way to Alaska as any kind of a radio operator. But it turned out I did that spring. I had just about given up hope and was about to go home when I happened to go into a radio store (Northern Radio Co.) in Seattle and was informed that the U.S. Coast and Geodetic Survey were looking for radio operators. As they were government ships, I was informed it would not be necessary to have a license. So I went right down and canvassed all of the Survey ships, and was told I would be called as soon as they were ready to sign the operators on for the Alaska season.

On March 25, I received a call from the Coast and Geodetic ship "Surveyor" (WTEW) to report aboard the ship on April 1 at Anacortes, Wash. This was because the ship had been working on the Sound in the winter and would be in that port at that time. I left Portland, March 28, and reported aboard the ship at Anacortes. I was informed then that we would work on the Sound the next week; then go to Seattle for a week to get supplies and sail for Alaskan waters April 15.

The "Surveyor" was a 186-foot craft; carried 14 officers and 60 men, four being radio operators. The radio gear aboard was all a Ham could ask for and more. We had a Seargent long and short wave receiver covering from 10 up to 3600 meters, which was used only for the regular 600-meter watches. For short waves we had a HRO. The long wave transmitter was two 204 a's in pushpull using 600, 640m, 660, 705, and 800 meter marine bands for coast and ship work. The short wave transmitter was a 802 crystal, 802 doublers and 4 RK 20's in pushpull on 18, 36, 72, 120 and 189 meters. It was also screen grid modulated for phone work on 72, 120 and 189 meters.

We also had several SW3's for use in camps that we had ashore in Alaska, and several small portable transmitters using 616's in the circuit that was described in QST August '39. We also had two small motor launches with radio phone rigs on them which were used for communicating with them when they were working several miles away from the "Surveyor." We also carried a radio compass, 2 Fathometers for taking deep sea soundings and a Gyro compass and iron mic for navigating. We also carried gear for 6 radio controlled buoys.

The buoys, called Radio Sono Buoys, were used in determining the ship's position when out of sight of land or when foggy weather came up. These buoys consisted of a microphone or a hydrophone in a water-tight case, which was hung below the buoy proper that held the transmitter. The buoy transmitters were battery operated, and the filaments were on at all times. The Transmitters were a 1A5 crystal oscillator on 3410 KC and a 1A5 amplifier or final modulated with a 2-stage audio amplifier with the same type of tubes. These buoys were used in the following manner:

The buoys, 2 to 6 at a time, were anchored off shore at different known positions. When taking soundings--and we wanted to know our position--a bomb consisting of a pint can of dynamite and lead was lighted and thrown overboard. When the bomb went off, the sound would travel through the water and the vibration hitting the microphone would turn the transmitter on and send a signal back to the ship. From the time the bomb went off until the signals returned to the ship, they were timed and recorded on a tape. In this way the ship's position was determined. As sound travels about a mile a second through water, we had returns from as far as 90 second away or about 85 miles. Also in rough weather the buoys would sound off from the noise of the waves. When surveying, we would drop a bomb about every 20 minutes, the bombs being lighted with a water-proof wick. So when we were not on actual watch, we had plenty of gear to look after.

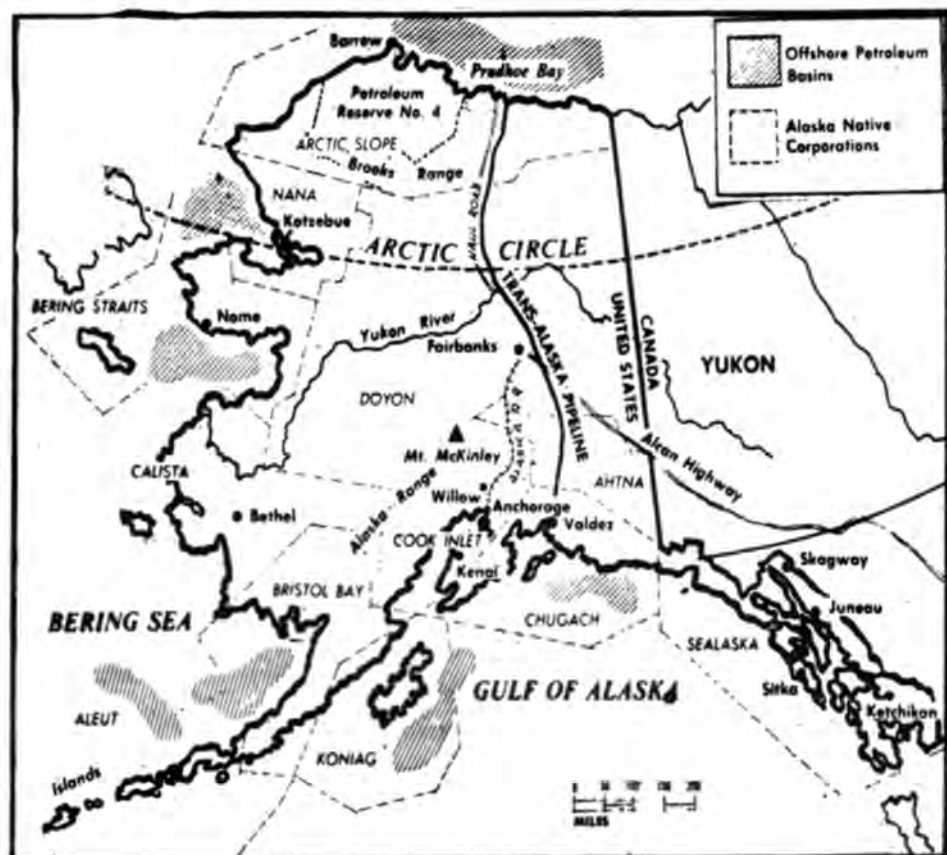
We sailed from Seattle for Juneau and arrived at Juneau April 19, the birthday of the writer. While at Juneau, I visited K7OK, K7FTM, K7AOC, K7DVM, K7BZX, all of whom were fine fellows. After four days in Juneau, we left and went up to Yakutat in the Gulf of Alaska. We were to take deep sea soundings and survey the coast shoreline from Cape Spencer to Cape St. Elias. But only a small portion of this was done in the first season's operations.

Yakutat is quite an Indian village of about 300 Indians and 50 whites. There is a Libby, McNeil and Libby salmon cannery, where a large portion of the famed Alaskan salmon is canned. The company has a 3-line cannery. However, the crew had not yet come up at the time we were first there. We tied up at the dock and stayed three days, establishing a tide gauge and unloading some of our extra supplies. The company has a 20-mile railroad that runs to Seatuck Bay where many of the salmon are caught. All fishing was done by seining, having no floating traps as in southeastern Alaska.

We then went back down the coast to Lituya Bay, where we established our first shore camp. Every two weeks thereafter, we went into some port for water, mail and supplies. So, after the first two weeks we went back to Yakutat to meet the Alaska liner, "Baranof"-KIGQ, for fuel oil, mail, and supplies. At other times, we met the "Columbia" WGCQ, the "Mt. McKinley" KEJU, and the "Depere" KDBA. The Otsego" WQCJ, steamer of the Libby's fishing fleet, came in and brought the crew for the salmon cannery. I then met the operator for the season, who was Mr. Wenkster (SWP member 936-P), and had had a look at the cannery radio station KKA. The station had a transmitter consisting of a 211 oscillator and four 211's as power amplifier for working on 600-690 meters for ship work and 212-227 kc for point to point service with Sitka WXC with the call at the cannery being K1AN. He had an old regenerative receiver and had some time getting it going. It later went out altogether and SW3 was sent up from Seattle. He had a 4-wire flat top for an antenna. The CAA also had just built a radio beam and beacon station there, which had several transmitters and receivers; and as the summer went on, they also built new homes for the operators. They had three operators when we left for the south. Also the Bureau of Indian Affairs had a small phone station consisting of a RCA 136 receiver and a Halicrafter transmitter for point to point operations. It operated on the call KAKV on 2616, 3092.5, 5207.5 phone and KAKF point to point on the same frequencies on CW. It was run by the district school teacher who did not like the idea so well. The station was not operated when the cannery station was operated in the summer.

On several other week-ends we went to Port Althorp for mail and water. This was a cannery of the Pacific Alaska Salmon Corporation and the operator there was Mr. Underwood, an old timer operator from KPE the Seattle Marine station. His call was KLW for marine work. He was so used to the old call KPE that when he first came up, he would accidently sign the KPE call, or when he heard a ship call KPE he would just about answer them, "hi, hi." They had quite a radio station here.





First for ship to shore K1W, he had a long wave transmitter and receiver for 600 and 640 meters. This transmitter also operating on 182 and 246 kc under the call K1AV, was used for point to point with Juneau WXA. They also had an FBX-A receiver for short waves and a transmitter consisting of the following: 2A5 crystal oscillator, a 740 buffer; and 2-203 a's in the final for CW, and was also modulated for phone with a crystal microphone to pushpull 57's, to pushpull 2A5's to class B Zb120's. He used KAIN for point to point phone between other canneries on 3092.5 kc and K1W for coastal phone to cannery tenders on 2512 kc and K1AW on the same short wave for point to point cannery CW operations. This company has five canneries in Alaska. I also made a short trip from Port Althorp to Elfin Cove by skiff and outboard motor.

I made several other short trips. At Yakutat one week end, went for a ride out the 20-mile railroad to Seatuck Bay, and saw them load the salmon on the cars for transfer to the Yakutat cannery.

On July 4 we went to Juneau for the holiday. One of the big scenic spots is Mendenhall Glacier, which is about 20 miles out of Juneau on the highway. Three other fellows and myself rented an automobile and drove out to see the Glacier. I was also out at Auk Bay, where the Pan-American Clipper ship comes in with Seattle mail. As this was one of her first trips, everyone was out to welcome her. The plane was a 4-motored craft; carried a crew of 7; 32 passengers, mail and express. I was granted permission to go aboard and see the quarters, but did not meet the radio operator. I also visited KINY the only broadcasting station in Juneau, and the Civil Aeronautics Station. I visited several of the Alaska line steamships that happened to be in port when we were.

One amateur that I visited while in Juneau was K7BZX, Doctor Woods. He is a minister and travels over Alaska doing the good work. He has organized several churches in different parts of Alaska and is instrumental in directing their activities. He owns a small boat which is maintained for the purpose of carrying him from place to place when it was necessary for him to travel by water. This boat was appropriately named, "The Messenger," which his wife helped navigate.

He was a man of versatile accomplishments, having acquired a marine captain's license, an engineer's license, and a second class commercial radio operator's license.

To go back to "The Messenger," he had just installed two new Deisel engines with the help of a young man. For radio gear on "The Messenger" he had a receiver of a little older model than we had on the Surveyor for long and short wave ranges. He had a transmitter that consisted of 2-211's in a Hartley circuit for the long wave 600-640 meter marine bands. His boat call was WIFH. So you will note I saw all kinds of radio gear and all kinds of use in Alaska.

There were seven other survey ships in Alaska also. There were WTEB "The Discoverer"; WTED the new "Explorer"; the WTEG the "Guide"; WTEH "The E. Lester Jones"; WTES "The Pioneer"; WTEX the "Westdahl"; and WTEY the "Wildcat," all of which were working in the Aleutian Islands except WTEX the "Westdahl" which was working in Honnah in southeastern Alaska. The Surveyor's call was WTEW.

One day while out surveying we passed the U.S.S. North Star, a ship that just recently took Admiral Byrd's little party back to Little America. She had just returned to Seattle and loaded for her regular trip north in the service of the Bureau of Indian Affairs.

Several ships heard, visited and worked over the air while in Alaskan waters were: the WTDB "The Brant"; WTDC "The Crane," who had W7HHV, Denny Moore as radio operator, WTDD "The Eider"; WTDE "The Teal"; WTDH "The Penguin"; WWFZ "The Brown Bear" that W7FVN Mel Bowdish on board as operator. KVCD "The Boxer" who had Art Olson W7GMY aboard and WYCR "The U.S.S. Cavanaugh." Other commercial ships heard were: WJEL "The North Sea"; WMDG "The Northland"; and all of the other Alaska line ships operating up there too numerous to mention. Also I heard all the cannery stations which were in operation during the fishing season, some of which were: KSR "Tyee"; KGP "Fake"; KEY "Todd"; KFD "Teneke"; KPR "Port Alexander"; KZN "Waterfall," and several others.

On August 24, we made a trip to historic Sitka to meet one of the steamers for supplies. While there I visited WXC, the army station and found none other than W7BB, Ed Stevens, from Seattle as one of the operators. I also visited the famous Shelton Jackson School for Indians, where they had quite an historic museum; the famous "Lovers Lane" and park where several of the old Totem Poles stand. Another sight was the famous St. Michaels Cathedral for which the corner stone was laid in 1844, and which was dedicated in 1848; also one of the original blockhouses built by the Russians for defending the town in the early days. It does not seem possible that this town under Russian rule was a thriving settlement long before Astoria on the Columbia River was founded. In the early days here in Sitka a lot of the bells now used in the missions of California were cast; several ships were built, and wheat was shipped from California, ground into flour and re-shipped to California.

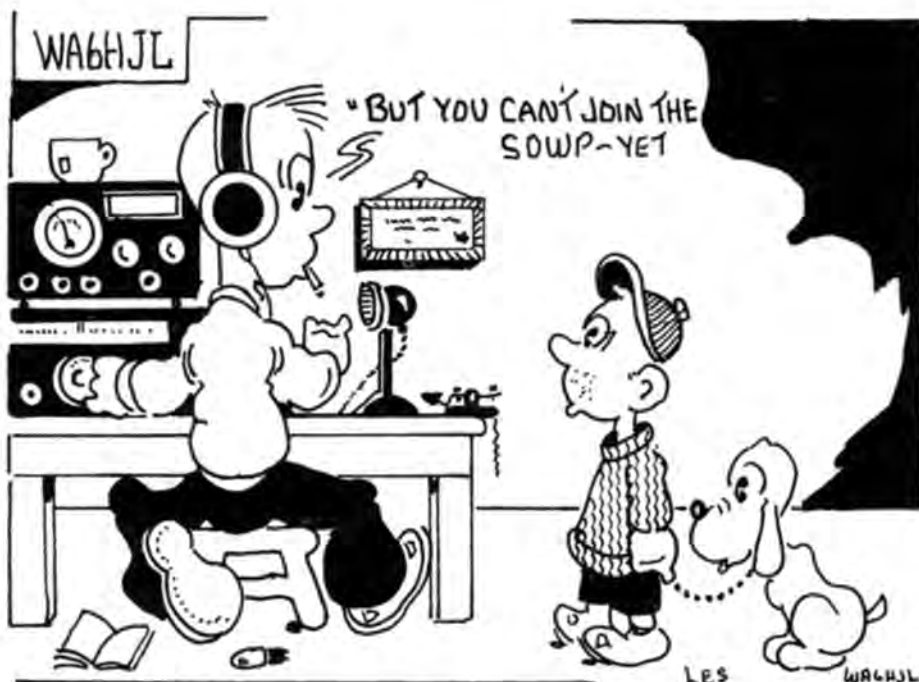
We had camp-sites out along the beach at several points along the coast between Lituya and Dry Bay. Landing the camps' parties was dangerous. The men and supplies were taken to the outside of the breakers in a motor launch and then rode to the beach in small whale boats. When we had our first camp out at Lituya Bay, a small crew were trying to land up the coast some distance, and the whaleboat in which they rode overturned in the breakers. The fellows had to walk back about 15 miles to Lituya Bay where the "Surveyor" could go back and pick them up. The "Surveyor" was the largest boat ever to enter Lituya Bay, and in order to go in, entrance had to be made on slack tides.

On September 24, we picked up all of our gear and left for Seattle, arriving there October 1, 1940. After a wonderful experience in Alaskan scenic waters, I returned to Portland and my old job. Thus ends the career of a radio Ham operating on ships at sea.

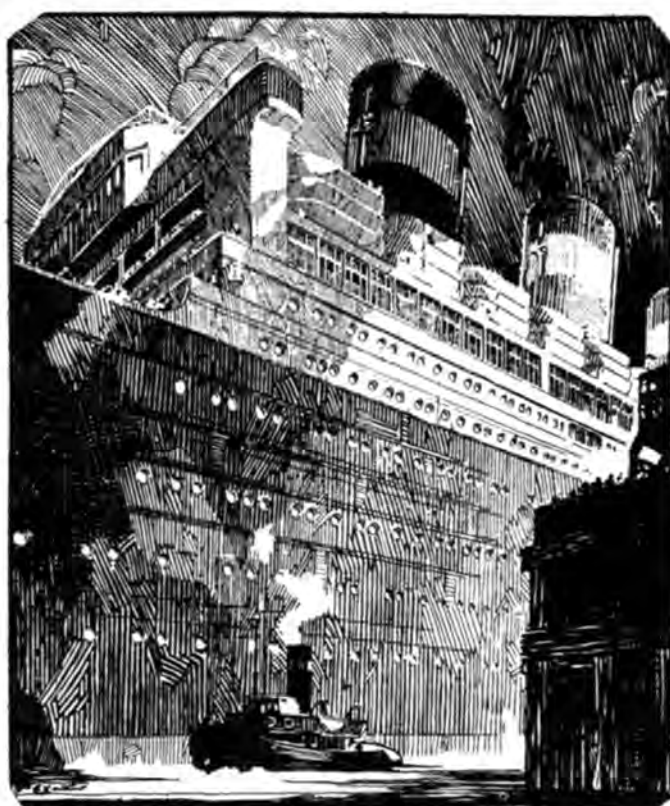
NOTE: Just remembered that at Yakutat the cannery bookkeeper had a ham receiver and transmitter but no ticket. So one night I fired it up on 40 meters and QSO the states with my call portable. Don't remember what the rig was but it was a home built job and worked very well. I still have one of the portable transmitters that we used on the beach. It has a 6V6 XTAL oscillator and a 802 final. Very nice little rig.

Regarding the buoys mentioned. One of them broke loose from its anchor and started floating away. So they just dropped the bombs and soon they found its position and came right up to it and picked it up as the receiver kept on operating. Another got full of water from a leak and had to be picked up.

--John Peel W7LT

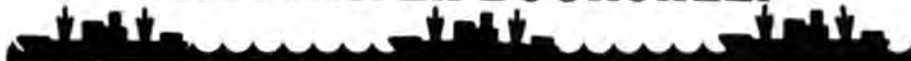






# Book Reviews

## SALTWATER BOOKSHELF



been successful as a publicist ranging from his three-year campaign to find the wreck of the first steam ship Savannah to his campaign to honor her by naming the first nuclear ship after this pioneer liner, plus success in carrying out OPSAIL 1976, the major event of the American Bicentennial celebration.

### FAMOUS AMERICAN SHIPS (REVISED AND ENLARGED EDITION)

Frank O. Braynard - Hastings House Publishing Co., 10 East 40th St., New York, NY 10016. \$12.95 (R-1978)  
The 'Table of Contents' tell the story. From the Viking Ship circa 1000 AD to the Sea-Land Resource 1973 and the SS Independence - 1976 the book covers some 76 ships - many you have read or heard about. We think this book includes all ship types in the Maritime Hall of Fame as well as the principal areas of service, coast, ocean, river and lake. The importance of the book is a tribute to the American Merchant Marine past and present. It is a book most sea-going radio men would enjoy. Like the Leviathan series, I recommend it highly.

### SHIPS AND MEN OF THE GREAT LAKES

Dwight Boyer - 1977 Dodd, Mead & Co. NY.  
Ships and Men of the Great Lakes spans more than a century of Great Lakes history in a series of true, thoroughly documented dramas, most of them being the adventures of vessels and men who sailed them. 208 pages, 16 pages of illustrations.

### GOLDEN THROATS & SILVER TONGUES

Ray Poindexter - 1978. River Road Press, P.O. Box 1174, North Little Rock, AR 72115. This book brings back the 'early days' of broadcasting and is of considerable interest because many of the announcers named throughout the book were radio men to start with and known to many of us. It is sort of a Directory of these announcers with 'thumb nail sketches' of their personal history thrown in for good measure. I found it quite absorbing.

### RADIO'S FIRST VOICE - The Story of Reginald Fessenden

Ormond Raby - 1970. Macmillan Co. of Canada, Ltd. 70 Bond St. Toronto So "Who invented Wireless?" Reginald Aubrey Fessenden, born in Quebec, Canada in 1866 perhaps has a good claim to fame as many others who have been proclaimed the "Inventor of the Wireless". The story of his achievements are well worth reading. Review copy was donated to the Society by Member Johnny Sandison.

## "The Liner is a Lady"

### LEVIATHAN (VOLUME 4) "THE WORLD'S GREATEST SHIP"

Frank O. Braynard - Mariners Museum, Newport News, VA. \$35  
One look at Frank Braynard's new book (Vol. IV) will convince most any nautical buff that here is a 'Super-Book'. The lay-out, content, texture, illustrations in all of its 424 pages are superb. This volume covers "Life Aboard" the great ship. We noted reference to a number of Society members in the book which make it all the more interesting. Frank Braynard has had three careers. He has been a life-long professional artist; he has authored a dozen published books, countless encyclopedia pieces and articles for publication and he has

SLOP  
CHEST

## QSL CARDS FOR MEMBERS

### QSL CARDS - PRICE LIST - 1978 DESIGNED & PRINTED FOR MEMBER USE

Thousands of SOWP QSL CARDS have been ordered by members all over the world and many of them have sent in repeat orders. We have been told by many that they are not only unique but "tops" in our field. The shells on quality Kromocote stock are printed in two colors (Red and Black). They are furnished ready for imprinting or our printer will do it at very reasonable cost which is quoted below. No change in format is available for address side of card, but copy for front can be tailored for space available to personalize them. We would like to invite you to use the Society's prestigious card which brings a welcome where ever received. Sale of cards is limited to active members and Technical Associates only. Below is price list. Orders will be sent worldwide except to countries to which mail is not accepted. The increase in price is due mainly to those imposed by the U.S. Postal Service on May 29 1978. Prices subject to change if and when any other change is made. By ordering press runs into the thousands on our shells, we are able to pass on the benefit of quantity prices on color and quality that would normally cost much more.

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		100	200	500	1,000
1.	Shells (Unprinted)*	2.50	4.75	10.00	19.00
2.(a)	USA Mailing charges	1.55	2.20	3.00	3.70
	(b) Do. Canada, etc.	2.70	2.70	4.10	4.80
	(c) Do. Foreign/Overseas	3.25	3.25	4.45	6.45
3.	TOTAL SHELLS/DLY USA	4.05	6.95	13.00	22.70
4.	Member's Imprinting	5.75	6.50	8.25	12.50
5.(a)	TOTAL COST USA Members	9.80	13.45	21.25	35.20
	(b) Do. Canada, Mexico &	10.95	13.95	22.35	36.50
	(c) Do. Foreign/Overseas	11.50	14.50	22.70	37.95

#### NOTE # 1

This is cost of Society Shells which are preprinted but without the Member's individualized copy. Weight of shells approx 10 oz per hundred shells. Size is 3-1/2x5-1/2 inches. "Printed in U.S.A." on the address side in fine type complies with laws of some foreign countries

#### NOTE # 2

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#### NOTE # 3

Total cost including stock (shells) postage, placking, insurance etc.

#### NOTE # 4

IMPRINTING. This is cost of imprinting copy by our printer and is the exact amount collected. Calif. members should include 6% taxes on the total of item 1 and item 4. Include in all checks made out to SOWP. LEGIBLE COPY will have to be furnished by member. We reserve the right in some cases to edit, if necessary. The normal format followed is that of W5QKU as shown on this page. No change on reverse side which is preprinted in black. Should member wish color other than Black on face of card a charge of \$2.00 is made by our printer. Occasionally, our printer has large jobs which may delay processing, hence we hope members ordering will take this into account.

#### NOTE # 5.

This is the total and over-all price for stock, imprinting, shipping with insurance covering to (a) addresses in the U.S.A. or served by the U.S. Postal system; (b) Canada, Mexico - see 2(b) and (c) all foreign countries. Members in foreign countries should arrange payment in U.S. FUNDS. Cards are sold at near cost so we can not afford loss on exchange. If priority or air mail shipment is desired, be sure to add necessary funds to cover.



## PATCHES

## (CRESTS)

# SCRIMSHAW

## LABELS



## SOWP SLOP CHEST

### POSTAGE PAID ITEMS

#### LABELS

#1. BLUE on white 3/4x1 1/4 per 100 .. \$1.00  
#2. RED on white - 1-1/2" circle ..\$1.00  
50/50 pack of above . . . . . 1.00

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Durable, Vinyl. Rich dark blue on yellow stock, water resistant, self stick. 3-1/2 wide x 5 inches high. Ideal for weather & where durability is required such as on your car. Each . . . . . \$1.00

#### PATCHES / CRESTS

Multicolor - 3 inch size . . . . \$1.50  
Large 7-1/2" for back of coat . . \$5.50

#### BANNERETTES

Beautiful SOWP wall emblem . . . . \$2.50

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ITEM & QUALITY	50	100	300
Letterheads	2.00	3.75	10.00
Note Heads	1.75	3.25	9.00
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Env. #6 Small	2.50	4.00	11.50

### NEW ITEM: COASTERS 50¢ each

Prices on above Prepaid, except insurance to U.S. Addresses 50 cents and to Canada 85 cents.

### S.O.W.P. BANNERETTES

for HAM SHACKS  
STATIC ROOMS  
DENS

only 25¢ Each

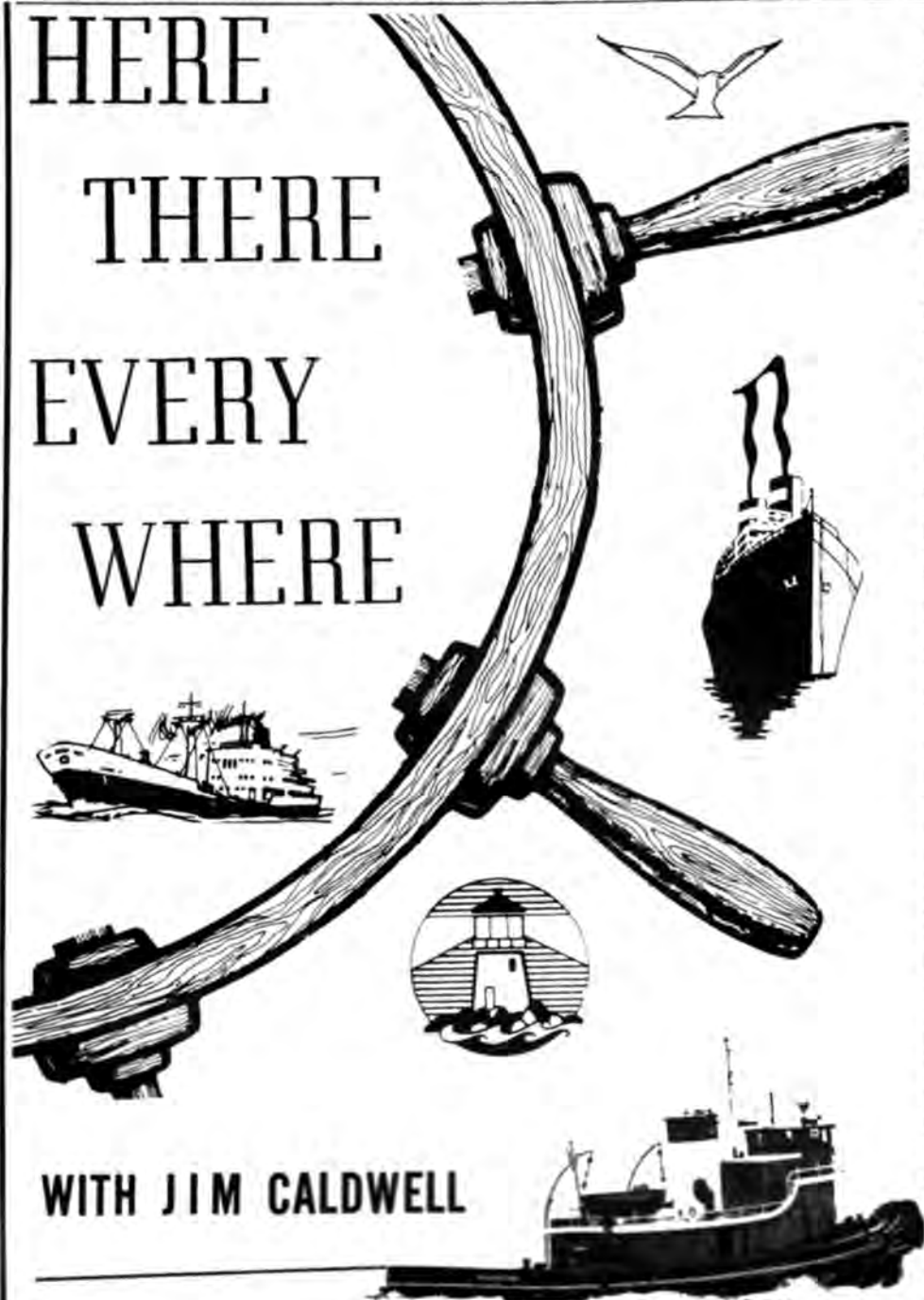
Size 9" x 12"

A beautiful personal identification of your S. O. W. P. membership. Rich blue velveteen emblem and trim on a gold felt bannerette. Clever, gilt spearheads, gold rayon cord and tassels. Simulated blue borders and fringe.





HERE  
THERE  
EVERY  
WHERE



WITH JIM CALDWELL

## OVER THE SEVEN SEAS

**R**eading Russ Ormsby's notes reminded me of the time I was assigned to operate on the various sea going tugs "Sea Lion," "Sea Ranger," "Sea Scout," etc. Some of the tugs did not have radio sets on them and sets had to be transferred off from a tug not going out.

At this time I had just come in from a long trip towing one of the German iron barkentines from Mexico way and a call was out to proceed north along the Oregon Coast to pick up a disabled ship!

My clothes were all dirty and I had taken them to the laundry. So the Port Captain decided not to transfer the radio equipment onto the particular tug going up north. So I did not go.

They were towing the ship off the Columbia River when the tow crew noticed the tow line was slack and no headway. It turned out the tug and tow had hit the ends of the tow line at the same time as the seas were very high and yanked out the towing engine so the tug sank like a ton of lead. All hands were lost. Except me--as I did not go due to circumstances! One life preserver was found on the Oregon beach later.

Then the time when I was on the USSB NILE--built in Seattle--K O S D--on a trip around the world, transiting the Suez Canal, the tides caught the big ship and she went crossways in the canal with the bow in Asia and the stern in Africa. We tied up all Canal tfc until next day when the tide changed and a swarm of tugs pulled her free! She is now on the rocks off the coast of North Africa near Algiers.

Incidentally, the ship I was on at the particular time, the USSB WEST GOTOMSKA rescued the USSB COHASSET which was the ship that rescued ole RAY MYERS when his submarine, the NAUTILUS, had to be towed into port or abandoned--I have forgotten.

We docked in Gibraltar astern the "S.Y. ELETTRA", Guglielmo Marconi, owner. Ernest Hawkins, SS COHASSET, and I went aboard and got acquainted with the chief radio engineer who introduced us to Sr. Marconi. I have pictures of all this.

Incidentally, "Hawk" and I rigged up a grid modulated xmtr. out of the SE 143 recvr. (oscillating) and an old telephone mike and did some illegal transmitting and believe it or not the Spanish station at Tangier put out a "qrz" and in English--"who is the station on voice," or words to that effect. We dismantled the rig in a hurry!

Back in the early '20's when floating mines were still quite a menace in the North Atlantic and watches were maintained on the lookout for them, and SOS'es were numerous every night mostly from American ships disabled, we were in the Mediterranean heading for Athens, Constantinople, Galata, Varna and Odessa, plus other ports in the Black Sea, I heard an SOS. At that time I knew the ship, her call and the opr. They were in a sinking condition in a bad storm and believe me the Black Sea can kick up some bad ones, when Fred Selim, the opr. said they were going down and goodbye and good luck to everyone listening. They were lost. They probably had a load of iron ore from Batoum or Poti or Novorossisk. Probably (Batoum) was a Hog-Islander as most of the Bull Line ships were. My memory as to exact details is fuzzy!

The CHOP on the old "Levi" not only was a top grade opr. with a Comm'I. Extra but also carried a pilot's license. He offered me a job one time as fourteenth opr. or something of the kind but even that was an honor. He said they made pretty good money on the "Levi" but I told him with thanks that I was not looking for money--all I wanted to do was TRAVEL! And, boy, I sure made it.

Don Goodger was the fellow responsible for my joining the URTA. His cousin was CHOP on the WMP, I believe.

Here are a couple more names I have not seen mentioned:

Art Dahms - was on the WGP when I was.

Parenti, who lived at the old Alpine and worked down at "Remler," I believe it was.

Johnny Flagg whom all the poker players at the Alpine knew well (1919-1920) and whom I last met in Bklyn on some ship. Maybe Frank Geisel was involved in that visit. I have forgotten. Anyway, Johnny went to Alaska and I heard he died back in the late '20's.

Cheesbrough - one arm off, like old Kelly. Remember?

Once in a while I can recall some people and incidents when the memory banks decide to function!

I was with both RCA and IWT, with IWT mostly with Charley Hahn as CHOP for a number of years. He was a mighty fine fellow. And old WSA was my favorite stn. I worked him with a "TR" less than a thousand miles from Brisbane, Australia one night. Spk. not tube xmtr.

One time on a trip around the world on the USSB "M.S. William Penn," 12,000 tons, flush-decker, I had a power transformer burn out. We had a 1/2 KW Navy spk and a 2KW Federal Arc for transmitters.

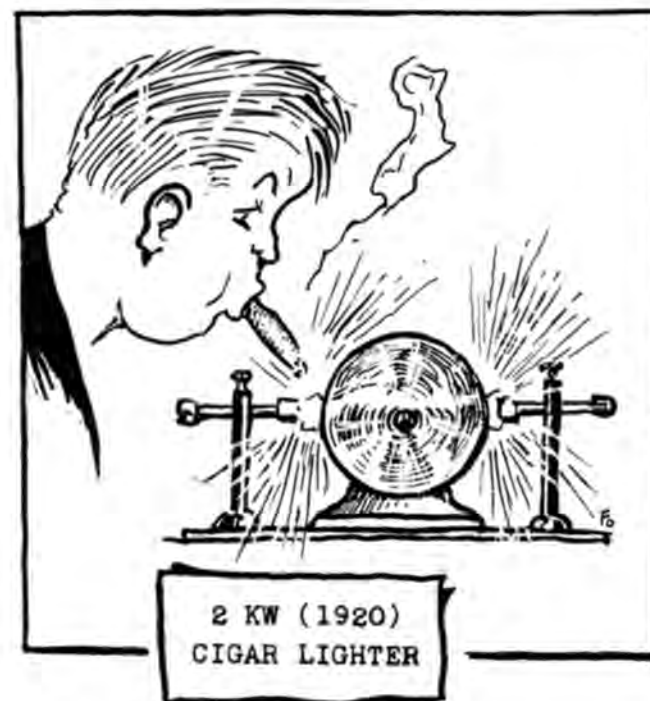
I decided to find out if I could catch up with the break as I could hear the arc loudly and apparently near the outside, so I took the core apart and unwound about two or three layers of winding and found the place where the #26 was burned in two. Soldered it back and rewound the wire and finished assembling the core and she was back on the air!

Another time on the USSB EASTERN DAWN with only a 2KW arc, the high voltage opened up. After tests, I decided to pull the armature. I got the 3rd asst. engineer to help me. Of all things the motor generator was mounted up on the bulk head at about five feet above the top grating in the engine room hanging over the deck at the bottom of the engine room, at 25 feet!!! Well, we managed to get it out but we almost became over balanced and nearly lost the armature!! I have often thought what a mess that would have been! We both had the shivers for a while!

Bill, there are many more incidents of interest but under the circumstances, I thought I had better get this in while possible.

So long again from the old sea going cowpuncher.

--Jim Caldwell, 10-P





# PIONEERING THE "CHINA-CLIPPER" ROUTE ACROSS THE PACIFIC



Continued from back page

as reported by

W. T. Jarboe, Jr.

(Before Loop Change). "KGU" the broadcast station at Honolulu was first heard on the plane DF with volume enough for bearings 1 hour and 40 minutes before arrival, and the bearings taken with the plane D. F. from then on were accurate. However the 1638 kc signal from Honolulu station was of no use whatsoever on the plane D.F. Various tests were made but the signals were unheard until the plane had sighted the island. Results on the original Martin D.F. seem to fall far below the results obtained on the Sikorsky S-42 on other flights. On the basis of this comparison, and attribution it to the reduced area of loop with corresponding less pickup, I wired the Division Comm. Supt. to this effect, advising or suggesting that the loops on the other Martin be rebuilt to the Sikorsky dimensions. Arrival in Honolulu 2050 GCT.

With reference to routine communications, various frequencies were used, corresponding to the type of service, distance and local time factors. One hundred percent two way communication was maintained with good signal strengths and no unusual conditions or occurrences were noted.

The new system of one steamer control of the Pacific Weather reports was put into effect on this flight and worked very well, saving time, eliminating much useless calling and in every way expediting the handling of this portion of the work. Communication was maintained throughout the flight with the USCG Cutter Itasca, which was the weather control vessel, and the USS Wright, another naval vessel.

## Honolulu to Midway Island

HONOLULU TO MIDWAY ISLAND - Nov. 24th and 25th 1935.

NC-14716 Departed from Honolulu at 1704 GCT. Only two bearings were possible from the Honolulu station KNBF, and one of these bearings followed the characteristics of previous flights in this region by placing the plane to the North of the Islands when it actually was the South. From previous flights I have noticed that when within about two hours of Honolulu on this course, bearings from Honolulu KNBF apparently have a tendency to follow the general direction of the Northern coast of Oahu. Reference to previous D. F. charts will show this characteristic.

It was only possible to hold KGU, Honolulu broadcast station about one hour out of Honolulu at which time this carrier wave was lost. This in my opinion being due to small pickup of the new D. F. loops.

Midway Island began taking bearings on 5165 kcs with good results about six hours away and 5165 was used until within three hours of Midway at which time 1638 kcs was used the remainder of the way in. D. F. results of this flight with frequencies, antennas, distance, etc., can be better studied by reference to the charts of the flight.

Various tests were made during the day for bearing (old loop) 1638 kcs with plane D.F. but the plane was within 1 hour and 05 minutes of the Island before bearings was possible. At that time the split was 25 degrees at 45 minutes away 17 degrees; 30 minutes away 10 degrees; 16 minutes away 6 degrees. These bearings and splits however were very steady and definite. Landed at Midway at 0200 GCT, Nov. 25th 1935.

## Midway to Wake Island

MIDWAY TO WAKE ISLAND - Nov. 25 & 26th 1935

Departed Midway Island at 1812 GCT. I was only able to hold Midways 1638 kcs on plane D. F. for 38 minutes on this flight. Bearings were taken by Midway on 1638 kcs for 3 hours and 30 minutes, after which 5165 kcs was used with good results as reference to the charts will show.

During this flight the SS President Lincoln was slightly South of our course. Contact was established with this vessel on 500 kcs, weather and position reports exchanged and the vessel located by plane D. F. on 500 kcs, the accuracy of the D. F. being proved by the fact that the plane picked up and passed exactly over the vessel.

The first bearings were taken by Wake Island when three hours away on 5165 kcs with good results. One hour and forty minutes away frequency was changed to 1638 kcs for bearings with good results.

The first bearing was taken by the plane on 1638 kcs when one hour away (old loop); following the usual practice when making a landfall I had Wake Island test for me at frequent intervals for plane D. F. purposes. When within about twenty or thirty miles of the island I found the genie dial beginning to shift quite rapidly showing the island to be on the port bow, but as yet invisible. These readings began to shift more and more rapidly with the island still invisible. Not having time to compute the record official bearings with their magnetic and radio corrections, I asked Wake to hold the key down and simply called the pilot's attention to the genie dial. I understand that the course was changed almost forty degrees to bring the island dead ahead. It is my opinion that we would have possibly passed the islands to the West a few miles without sighting it had it not been for these bearings. Landed Wake Island at 0240 GCT

## Wake Island to Guam

WAKE ISLAND TO GUAM - Nov. 26 & 27th, 1935.

Departed at 1900 GCT. I was only able to hold Wake on the plane D. F. 1638 kcs for one hour and thirty minutes, with the following results; 30 minutes out 8 degree splits; 55 minutes out 10 degree splits; 1 hour 20 minutes out 18 degree splits, which was the last bearing obtainable with the plane D. F.

During this flight the USS Chester/NAFV was contacted on 5165 kcs, weather and position reports exchanged and bearings taken by the plane on 500 kcs. These bearings brought the plane directly over the vessel.

Bearings were taken on both 5165 and 1638 kcs by Wake Island for 4 hours 15 minutes. However the calibration curve on Wake Island seemed to place us quite a distance South of course, and as the known position of the USS Chester proved, were in error.

The first bearing was taken by Guam on 5165 kcs when 5 hours and 15 min. away, and were fairly accurate from then on on 1638 and 5165 kcs. The island of Guam was covered by rain squalls and the landfall was made by D. F. However, could not hear the Guam 1638 kcs on the plane D. F. until about 20 minutes away. 0505 landed at Guam.

## Guam to Manila

GUAM TO MANILA - Nov. 28th & 29th 1935.

Departed Guam Nov. 28th 2020 GCT. Guam's 1638 was too weak to use for plane DF purposes eighteen minutes after take-off. Due to early take-off 500 kcs was used. for bearings from the ground station for 1 hour and 30 minutes, then shifted to 1638 kcs which was good until 2 hours and 30 minutes from Guam. 5165 kcs held good until 3 hours and 10 minutes away, at which time Guam reported it too weak for bearings. Shortly after this I had to shift to 8220 kcs for ordinary communication purposes.

Manila's first bearing was taken on 1638 kcs about 2 hours 30 minutes from Manila, by which time we had already made our landfall along the coast of the peninsula. I made various tests to hear his 1638 kcs on the plane D. F., but, while it was QSA 3 to 4 on, trailing and fixed antennas, I was unable to hear it on the loop until the plane had sighted Manila. Landed Manila Nov. 29th at 0731 GCT.

## The Return Trip

MANILA TO GUAM - Dec. 1st and 2nd 1935.

Take-off Manila at 1853-GCT. 2 hours and 17 minutes before daybreak and 2 hours 55 minutes before sunrise. Due to the D. F. at Manila being of the loop type, the plane had been in the air 3 hours and 18 minutes before the first bearing was possible and this was given as approximate on 1638 kcs. Various tests had been made during this period without results. The last bearing possible was 28 minutes later, after which signals were reported by the ground station at Manila to be too weak for bearings on 1638 kcs. I used 5165 kcs for communication purposes which of course was no use for D. F. purposes on the Manila loop.

There were no more bearings for 4 hours and 30 minutes until within range of Guam on 5165 kcs, at which time the Guam bearings showed the plane quite a bit to the South of the course. Then 2 hours and 45 minutes from Guam I shifted to 1638 kcs which held good until 1 hour 15 minutes from Guam at which time shifting began due to darkness and 500 kcs was used to make the landfall. At 0842 GCS landed at Guam.

GUAM TO WAKE - Dec. 2nd & 3rd 1935.

Bearings were taken on 500 kcs by Guam until 1638 kcs became steady. When that became too weak 5165 kcs was used, all with good results from both Guam and Wake until sunset, at which time minimums became very erratic. When within one hour of Wake, I could hear his 1638 kcs on the plane D. F. but without any minimum. Used 500 kcs for landfall, however even these were approximate. Landed Wake Island on Dec. 3rd 1000 GCT.

WAKE TO MIDWAY ISLAND - Dec. 3rd & 4th 1935.

Took off at 1946 GCT. Bearings on 1638 kcs were fairly consistent for 2 hours 30 min. out of Wake at which time due to signal strength I shifted to 5165 kcs, after which bearings from both Midway and Wake became rather erratic from then on. The first bearing was taken by the plane on Midway's 1638 kcs about 50 minutes away and from there on into Midway they did not correspond with Midway's ground bearings. Our landfall 50 minutes later proved the plane D. F. to be correct while the ground station bearings were off. Dec. 4th 0450 GCT landed at Midway.

MIDWAY TO HONOLULU - Dec. 4th & 5th 1935

Take-off Midway 1812 GCT. The departure was made on 500 kcs which was used for 1 hour 45 min. out of Midway, at which time 1638 kcs was used for 4 hours 30 minutes then shifted to 5165 kcs and bearings began to become erratic. The last bearing from Midway was taken at 5 hours 30 minutes away from that station.

The first bearing from Honolulu was taken on 1638 kcs three hours from that station. Despite repeated tests only two of these bearings were any good. The remainder seemed to follow the trend to the North of the Islands as other charts have shown.

The broadcast station KGU Honolulu was first used for bearings 1 hour 30 minutes away with good results. Dec. 5th 0358 GCT landed at Honolulu.

HONOLULU TO ALAMEDA - Dec. 6 1935

Take-off Honolulu 0133 GCT. Obtained two good bearings on KGU but signals became very weak on plane D. F. approximately 1 hour 30 minutes after departure. The bearings from the Honolulu station on 1638 kcs were more erratic during this flight. Alameda's first bearing was taken when seven hours away on 1638 kcs and agreed very well with the navigator's position reports from then on in to Alameda.

Bearings were taken by the plane on KPO 2 hours 30 minutes away from Alameda and followed on in. However while the splits were well defined they shifted from 20 to 30 degrees consistently and bearings were taken as an average of from 6 to 8 readings.

During this flight the same procedure of having one control surface vessel for Pacific weather was used, with very good results. The SS MALA being the control vessel. I was in constant communication with the USCG Cutter Itasca and the Mala during the flight. Landed Alameda 1836 GCT.

## Operation Summary

During the entire round trip from Alameda to Manila and return, the following official traffic was handled:

POSITION REPORTS .....	237
MESSAGES (CITI).....	129
WEATHER REPORTS .....	136
BEARINGS .....	268
With OUTSIDE SHIPS .....	18
Total .....	788

This report covers mainly D. F. operations during the flight. With reference to the normal routine communication procedures, the usual one hundred percent two-way communication was maintained with no difficulty and no abnormal or unusual condx. experienced.

With regard to the plane D. F. loops and their pickup, I imagine a comparison between this report and the report submitted by Mr. Runnells who made a flight with the new and larger loops would be of interest.

Very Truly  
S/W. T. Jarboe Jr.



# Wireless Hall of Fame



**Andre' Marie Ampere**

## THE NEWTON OF ELECTRICITY

**BORN:** January 22, 1775  
Lyons, France

**DIED:** June 10, 1836  
Marseilles, France

ANDRE MARIE AMPÈRE, French physicist and mathematician, as a child amazed his parents by his flair for figures. He no sooner learned to read than he was into algebra, and at the age of twelve borrowed books on calculus from the college in Lyons. The fact that they were written in Latin did not stop André. There was no school in the village of Polemieux where he lived, so it is recorded that "Ampère had no teacher but his own genius." Later in life he reckoned that he knew as much mathematics at eighteen as he ever did; he had a retentive memory and read books on every subject.

When his father perished by the guillotine in 1793—when Lyons was taken by the army of the Convention—his farewell note to his wife recalled that the books and instruments of geometry for André had been their greatest expense, but advised her to regard it as wise economy "since he has never had any other master than himself."

"As to my son," he added, "there is nothing that I do not expect of him."

For a long time, his father's death seemed to blight André's existence; in fact, he confessed he was "without eyes or thought." An interest in botany and poetry brought him out of the dust, as he described it, but falling in love with Julie Carron really revived his spirit. They moved to Bourg where he taught physics and chemistry in the Central School. In 1803 he was appointed to the chair of mathematics and astronomy in the lyceum at Lyons. Broken by the news of his wife's failing health, on June 7, 1804, in his diary he prophetically wrote: "This day has decided the rest of my life." On July 13, Julie was dead.

Ampère went to Paris as tutor at the Polytechnic School. He married again in 1806, and continued his work as a professor. He published numerous papers pertaining to mathematics, chemistry, natural history and physics.

September 11, 1820, was another day that decided the rest of his life. He learned of Oersted's discovery of the relation of electricity and magnetism.

Soon Ampère proved by a series of new experiments that all magnetic effects mentioned by Oersted could be produced by the electric current alone. He formulated a definite rule for finding the direction in which a compass needle turns when a wire conveying a current is held near it. Also he demonstrated the important fact that two parallel wires, carrying electric currents, attract each other when the currents flow in like directions, and repel each other when they flow in unlike or opposite directions. He proved that the force of attraction or repulsion is directly proportional to the strength of the currents, and inversely proportional to the square distance between them.

James Clerk Maxwell called him "the Newton of electricity."

Ampère showed that a spiral conductor, when fed by a current, behaved like a magnet; that it had a north and a south pole. He offered the theory that every atom in a magnet was magnetized by virtue of a circular electric current surrounding it. He went farther to suggest that the earth's magnetism might be caused by currents

circulating around it from west to east. It was in this discussion that he coined the term electrodynamics. His discoveries led to many developments based upon magnets, especially the electromagnet, the heart of the telegraph.

The power of his intellect was so vast and his tongue was so eloquent that Ampère was said to qualify as the absent-minded professor and as a long-winded talker. Someone remarked that his absence of mind to the outer world came from his presence of mind to the inner. His consciousness had the power of sharp forms and concentration that made him a great thinker. He had universality of mind, a fact which historians attribute to his lack of sustained effort in any particular direction, for he was generally wandering into fresh fields, working in fits and starts.

"Doubt," said Ampère, "is the greatest torment a man can endure on earth."

Ampère died at Marseilles while on quest of improved health, and it is reported that "his death was transmitted to Paris by the semaphore." Yet to come was the telegraph, telephone and radio for which he had helped to lay the groundwork. In appreciation of his contribution, the International Congress of Electricians adopted his name for the practical unit of electric current—the ampere.<sup>2</sup> He asked that these words be inscribed upon his tomb: Happy at Last!

<sup>2</sup> *Pioneers of Electricity*, J. Munro, 1890.



**James Clerk Maxwell**

## DISCOVERER OF THE ETHER

**BORN:** November 13, 1831  
Edinburgh, Scotland

**DIED:** November 5, 1879  
Cambridge, England

JAMES CLERK MAXWELL, Scottish physicist, author, natural philosopher and eminent mathematician, discovered the ether. Modestly he referred to himself as an interpreter of Michael Faraday's ideas, but the world of science knew better, for his life was crowned by extraordinary electrical investigations.

Maxwell was well descended. His father had an aptitude for the mechanical arts, and his mother possessed artistic talents. It is recorded in his biography,<sup>1</sup> that Maxwell's memory went back to when he first remembered lying in the field, "looking at the sun and wondering."

The inquisitive lad was incessantly asking, "What's the go o' that?" He read every book he could get. Childhood marked by solitude in the country tended to make him shy. His mother died when he was nine, and in 1841 his father entered him in the Academy at Edinburgh. When, in 1844, he began the study of geometry, his talent became evident, and versatility marked his work for he also liked to draw and to versify. He left the Academy in 1847, with the first prize in English and mathematics, and enrolled at the University of Edinburgh where his professors soon saw evidence of a penetrating mind.

Electricity, magnetism, chemistry and optics led him into deep mathematical study, and the year 1850 found him at Cambridge steeped in science. His tutor is said to have described him as "a most extraordinary pupil, a man of genius with all its eccentricities, and a scientific luminary of the future." And he added, "It is not possible for that man to think incorrectly on physical subjects."

Said Maxwell: "He that would enjoy life and act with freedom, must have the work of the day continually before his eyes."



In 1856 he was appointed professor of natural philosophy in the Marischal College of Aberdeen. A year later he married Katherine Dewar, daughter of the principal, and in 1860 they moved to London, where Maxwell taught natural philosophy at King's College. In his attic "laboratory" at Kensington, he wrote scientific papers and conducted numerous experiments. For his researches on light Maxwell was awarded the Rumford Medal of the Royal Society in 1860, and a year later delivered his first lecture at the Royal Institution on the theory of the three primary colors.

Resigning from King's College in 1865, he retired to write, producing in 1870 his noted treatise on heat.

Fascinated by an idea gleaned from experiments that the attraction or repulsion produced by electricity and magnetism were caused by some "action at a distance"—by an unseen medium in space—Maxwell was determined to find the "missing link," mathematically at least.<sup>2</sup> As a result, he identified the ether—the medium of light and heat believed to permeate the universe. Light and heat, he concluded, were electromagnetic undulations in the ether. Maxwell was said to have discovered "an elemental ocean in which the truth may yet be found."

His masterful treatise *Electricity and Magnetism*, presented to the Royal Society in 1864, and in fully developed form in 1873, on the electrodynamic theory of light is remembered as "one of the most splendid monuments ever raised to the genius of a single individual." In that treatise he evolved the famous equation from which he predicted, solely from mathematical reasoning, the existence of ether waves; he speculated on the possibility of the production of electromagnetic waves which would detach themselves from a source of origin.

Therefore, the history of wireless registers Maxwell as the discoverer, in 1867, of the ether, described as "an imponderable, electric medium supposed to pervade all space as well as the interior of solid bodies; the invisible, odorless, tasteless substance assumed to exist, through which light, heat and radio waves are transmitted."

Heinrich Hertz later produced the electromagnetic waves and proved Maxwell's theory to be correct.

By the time Marconi came along, Maxwell's theory made it possible for teachers to compare the ether with a pond, so that laymen might understand the mystery of wireless. The ether was pictured as a placid pool; toss in a stone and there is a series of ripples or waves, depending upon the force with which the stone strikes the water. That stone is the "transmitter." If tiny floating objects such as pieces of wood or cork float on the surface, they bob up and down in accordance with the waves; they are the "receivers."

It was all that simple!

Maxwell continued to contribute numerous papers to scientific societies; he wrote on atoms and molecules, on matter and motion. In 1874 the Cavendish Physical Laboratory, designed and built under his direction, was opened at Cambridge.

It was said that Maxwell contemplated the inner scene of Nature and envisaged an ethereal bond uniting the most diverse forms of matter. In 1877 his health failed; his brain refused new tasks.

Near the end he remarked, "I have been thinking, how very gently I have always been dealt with; I have never had a violent shove in all my life. The only desire which I can have is like David, to serve my own generation, by the will of God, and then fall asleep."

His doctor said, "No man ever met death more consciously or calmly," although he suffered great pain in his illness. After a memorial service in the Trinity College Chapel, the body of Maxwell, who had lived "a most perfect example of a Christian gentleman," was removed to his old home Glenlair and buried in the churchyard of Parton.

A century later, the hundredth anniversary of Maxwell's birth was celebrated by the scientific world's "digging a grave for the theory of luminiferous ether," but at the same time honoring his mathematical genius. In 1931, his ether theory was called "that supreme paradox of Victorian science and yet a triumph of the scientific imagination," which as convenient fiction helped physicist and layman to bridge a mysterious gap, closed when the world realized that wireless waves are electromagnetic, not "ether."

In fact, it was remarked:

Maxwell could not believe in "action at a distance." To see a star the eye must touch it in a sense. To attract a needle a magnet must be "connected" with it. Maxwell invented an ether that satisfied the conditions. . . . Just as Newton's laws of gravitation unified the heavens so the ether unified energy and matter. . . . Maxwell's fate is much like Newton's. . . . Were he alive he would probably concede that his ether was no more real than the equator of the geographers—that it was necessary and convenient fiction without which science of his day was helpless.<sup>3</sup>

<sup>1</sup> *The Life of James Clerk Maxwell*, Lewis Campbell and William Garnet.

<sup>2</sup> Christiaan Huygens, physicist and astronomer (born April 14, 1629, at The Hague; died June 8, 1695), worked out a theory of undulation of light in an unseen conveying medium—an airy nothing filling the emptiness of space. He disclosed his theory at a time when scientists and philosophers were pondering the problem of a medium to account for the phenomenon of light. Otherwise how could light travel from the sun to the earth? Could interstellar space be filled with an invisible substance, a sort of liquid-filling matter? Huygens also won fame by applying the pendulum to clocks and through his researches in physical optics.



## Reginald Aubrey Fessenden

AMERICAN PIONEER IN WIRELESS

BORN: October 6, 1866  
East Bolton, Quebec

DIED: July 23, 1932  
Bermuda

REGINALD AUBREY FESSENDEN, physicist, radio pioneer and inventor, won fame through his early wireless experiments at Brant Rock, Massachusetts, after which Elihu Thomson called him "the greatest wireless inventor of the age—greater than Marconi."

Fessenden was born in the rectory of a small parish at East Bolton, on Lake Memphremagog, Lower Canada. When he was nine years old the family moved to Niagara Falls, and the boy entered DeVeaux Military College, alongside the Whirlpool Rapids. In 1877 he went to Trinity College School at Port Hope, Ontario, after which he attended Bishop's College at Lennoxville, Quebec. He next served for two years as principal of the Whitney Institute in Bermuda. His talent in mathematics steered him into electricity, which fast became the center of his interest, and so strong was the urge to work in this field that he decided to give up teaching and go to New York with the hope of fitting himself for a job under Edison. In Fessenden's mind only one inventor in all history ranked with Edison, and that was Archimedes.

Finally obtaining a job as tester with the Edison Machine Works engaged in putting down telephone conduits in New York, Fessenden worked his way to becoming one of Edison's assistants at the Llewellyn Park Laboratory. Edison encouraged him to specialize in chemistry because there were so many electrical problems that required chemistry for solution.

Interviewed in a New York newspaper in 1887, Edison was quoted: "I can take a Yankee boy and a china mug and get more results than all the German chemists put together." He is believed to have referred to Fessenden because several days later he said, "Fezzy, you will take charge of the chemical laboratory in the future." Thus Fessenden acquired the title of chief chemist of the Edison Laboratory.

The pendulum of his career swung back to teaching, for he left Edison in 1889, and after several positions, he went to Purdue University in 1892 as professor of electrical engineering. From there he moved to the University of Pittsburgh—then Western University of Pennsylvania, at Allegheny City. At both of these institutions he lectured on Hertzian waves and conducted numerous experiments to indicate their possibilities.

Speaking before the American Institute of Electrical Engineers in November, 1899, Fessenden said, "Having been forced some years ago into X-ray work with much loss of time and very little results to show for it, I considered myself proof against the seduction of liquid air and wireless telegraphy."

But wireless lured him and he soon was recognized as a leader in the field, first serving for a time as wireless expert of the United States Weather Bureau. At Cobb Island, Maryland, he began to conduct his own wireless experiments—to develop the Fessenden System. He believed the wireless art had started on the wrong track, and he aimed to set it right—on sound, scientific principles. At Roanoke Island, North Carolina, he conducted further tests of "prolonged oscillations," or continuous waves, also some of the earliest radiophone experiments.

In 1902 the National Electric Signaling Company was formed with Fessenden wireless patents as its backbone. In 1905 Fessenden's wireless activity shifted to a new station at Brant Rock, Massachusetts, where he developed the high-frequency alternator, radio telephony, the electrolytic detector and a heterodyne, or "beat" receiver. Brant Rock in 1906 attracted much attention as one of the pioneer transatlantic stations, having established communication with Machrihanish, Scotland. On Christmas Eve, in 1906, phonograph music and speech were broadcast; ships reported reception as far down the coast as Virginia, and later the voices were reported received in New York, Washington and New Orleans. (Continued on Page 28)



## Reginald Aubrey Fessenden

As the result of his Brant Rock experiments, Fessenden foresaw much that was needed to advance the art of wireless, and he encouraged Alexanderson to develop the alternator that won renown in World War I.

Fessenden also invented the rotary spark gap,<sup>1</sup> and pioneered in the development of the wireless direction finder. He was one of the first to realize the importance and possibilities of short waves. On September 28, 1901, he applied for a United States patent covering "improvements in apparatus for wireless transmission of electromagnetic waves, said improvements relating more especially to transmissions and reproduction of words or audible sounds."

Charles J. Pannill, a pioneer in wireless, who later became President of the Radiomarine Corporation of America, said:

I worked with Fessenden from 1902 to 1910. He was a great character, of splendid physique, but what a temper! Many of us were fired on more than one occasion, and usually on some slight provocation. When he cooled off, he was sorry and hired us back, always at higher pay. He had a marvelous vision; he told me in 1903 of things that would happen in wireless 20 years later, and they have all come true.

Fessenden could think best when flat on his back smoking Pittsburgh stogies; that's when he got his real ideas. At Old Point Comfort, Va., he had a radio shack built on the sands away from the main shop at Old Point, so he could go off by himself and think.

Late in 1903, Fessenden set up stations at Washington, Collingswood, N.J. and Jersey City, N.J.—that was the first overland wireless. In 1904, we made tests of the Fessenden apparatus for the Navy on board the U.S.S. *Topeka*. The Navy installed a station at Navesink Highlands, N.J. (Sandy Hook), and we had a Fessenden "interference preventer" receiver at the Brooklyn Navy Yard. We were able to communicate with the *Topeka* at sea from Sandy Hook! Later we tried to establish communication between Lynn, Mass., and Schenectady, N.Y., but even with a 5-kilowatt spark we couldn't make it, apparently because of ore deposits in the intervening Berkshires, but Schenectady heard the Brant Rock signals without any trouble.

Fessenden, whose experimental stations were usually located on the seashore, "ran his office in a bathing suit." Reminiscing one day, Roy Weagant, one of his early assistants, said:

He could be very nice at times, but only at times. His voice boomed like a bull. . . . He had no regard for cost; he once sent for a 100-horsepower boiler and had it shipped by express. The more anything cost the better he liked it. He was sometimes unsound technically, but he more than made up for this by his brilliant imagination. He was the greatest inventive genius of all time in the realm of wireless.

If he had confined himself to being a discoverer and a creator, and had let the commercial designing end of the business alone, his company would have dominated the world. But he wanted to boss the design of everything, to every last detail, including the binding posts. He demanded high speed from his alternators and from his men. Results, plenty of results, and results quickly, were what he wanted. He had an utter disregard of money.

More than 500 inventions were attributed to Fessenden in the varied fields of electric waves, sound and light. His electrolytic, or chemical detector, introduced in 1902, increased the range and effectiveness of wireless. It used a solution of 20 per cent sulphuric or nitric acid into which dipped a silver-coated platinum wire about the thickness of a horse hair. As a detector, it was a step between the coherer and the crystal to the electron tube. It was said of Fessenden that he discovered vital principles that paved the way for broadcasting, and a friend remarked, "When he took hold of an idea his mind glimpsed it as if looking through 1,000 windows."

Said Dr. E. F. W. Alexanderson: "Fessenden had a dynamic, inspiring imagination."

"The first actual transmission of speech by wireless was accomplished in December, 1900," said Fessenden when interviewed in 1915. "It was gradually improved until 1904, when it was working for 25 miles, and was tendered to the United States Navy. . . . On December 11, 1906, an exhibition of wireless telephony was given at Brant Rock, attended by Dr. Kennelly of Harvard and Professor Elihu Thomson."

During the First World War, Fessenden turned his attention to submarine signaling and developed what he called "the fathometer" for depth finding. He also is credited as originator of the turboelectric drive for battleships.

Fessenden, an indefatigable worker, tired by the strain of invention, the hectic pace of wireless and court battles in defense of his contributions to the art, passed away on the island of Bermuda far from the madding crowd, and it is there that he rests.

"His great spirit had passed," said his devoted wife, "merged, so it seems to me it must be, in the vast controlling force of the Universe."<sup>2</sup>

<sup>1</sup>The rotary gap consisted of a wheel or disc with projecting knobs or points which whirled past a stationary electrode on each side of the wheel. The pitch of the signal was varied by the speed of the wheel; the fanning effect of the wheel was self-cooling.

The quenched spark gap, designed to produce a violin tone in comparison with the rotary gap's whistle note, was introduced by Max Wien, physicist, born in 1866 at Königsberg. A student of Helmholtz, he specialized in electromagnetic waves and assisted Roentgen, 1891-93. The quenched gap comprised a number of flat copper or silver discs, three or four inches in diameter at the sparking surfaces, with their faces separated by a space about the thickness of heavy paper. A fan or blower cooled the gaps when high power was used; the gaps also had fins to help radiate the heat. The quenched gap aided in production of a so-called pure wave, one sharply tuned, and it had the further advantage of noiseless operation.

## Story About Detectors Scott

This device was much more costly and critical in operation than the tikker and so it never received more than moderate use. It was, however, a very impressive looking device.

When De Forest's audion became reasonably available, the heterodyne detector of Fessenden replaced the tikker and the tone wheel for the reception of c.w. signals. It had the distinct advantage of producing amplification as well as detection of the signal.

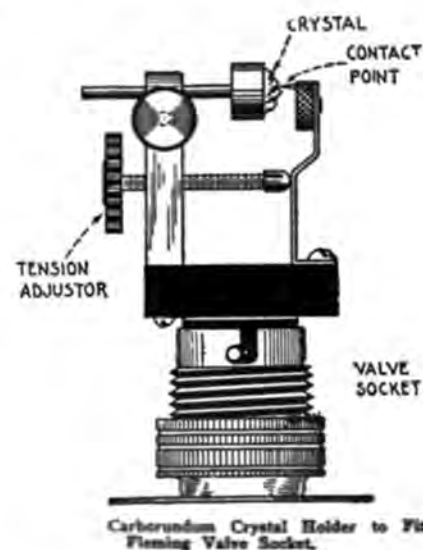
It is interesting to note that the invention of the vacuum tube and its widespread use put the crystal detector in limbo so to speak. Here it remained for many years until the advent of WW2 when microwave radars were being developed. It was then that the crystal detector saw the light of day again!

Transit time problems reared their ugly heads and gave much trouble at the microwave frequencies. Finally someone remembered the lowly crystal detectors of yesteryears. So, they were brought out, dusted off, and lo—the crystal detector once more came to the front and assumed a position of importance.

Sometime later the crystal detector was to be extensively modified by researchers to become what today we know as a transistor, which is a whole new story in itself.

And now - I wonder 'what next' ?

BY H.J. SCOTT



Carborundum Crystal Holder to Fit Fleming Valve Socket.

## QTH of CALLS

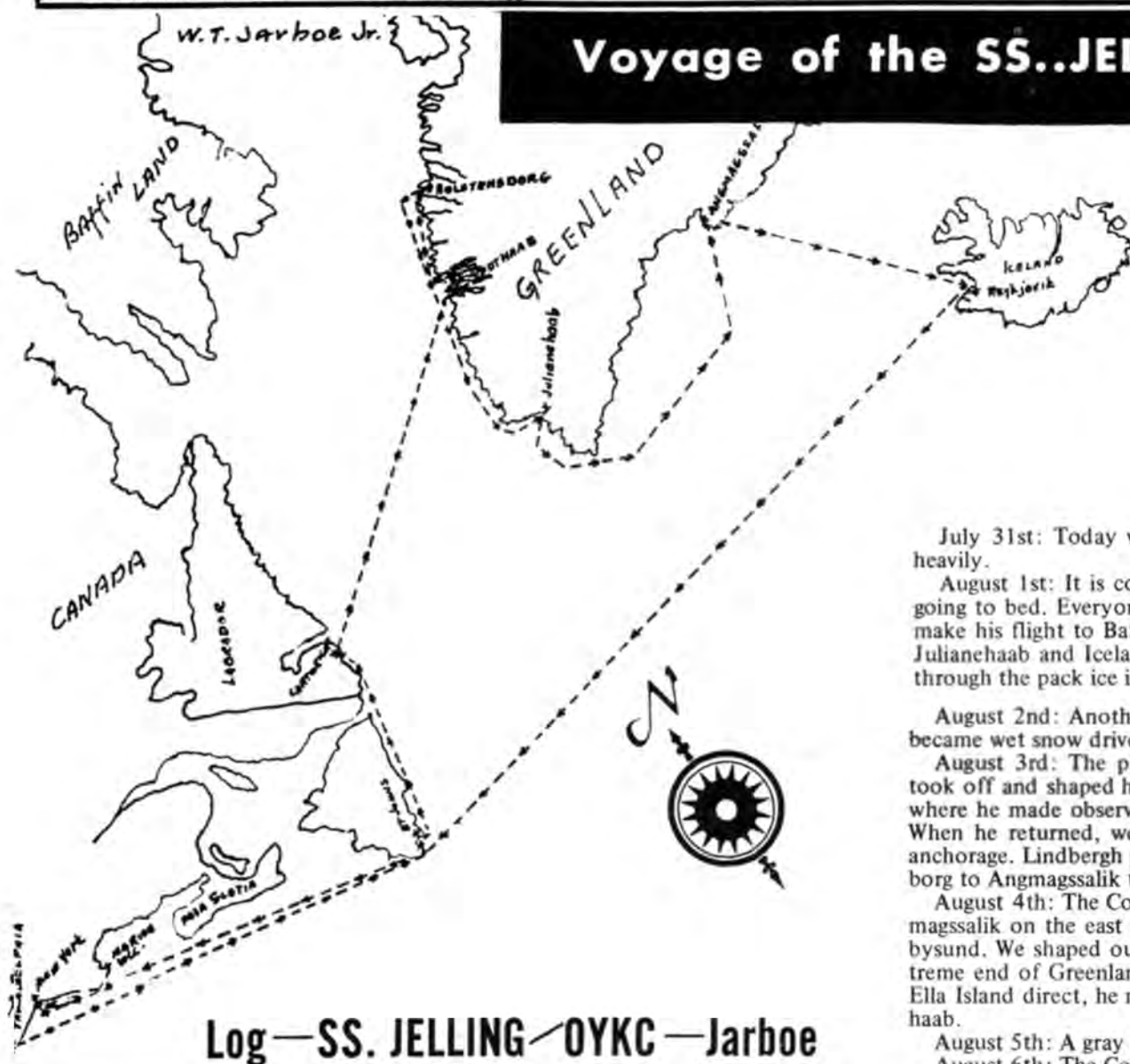
Here are the identification ( Location) of calls listed on Page 14. Good Luck !

1. WSL Sayville, NY
2. GKA Portishead Radio - England
3. SUB Port Said, Egypt
4. FFZ Shanghai-Zikawei
5. VAE Estevan, BC, Canada
6. VIS Sydney, NSW, Australia
7. VWB Bombay, India
8. CCV Valpariso, Chile
9. FFC Cherbourg, TSF, France
10. NPQ St. Paul, Pribilof Islands, Bering Sea.
11. VCS Camperdown, NS. Halifax
12. KHK Wahiawa, Hawaii (Oahu)
13. PCH Scheveningue, Holland
14. JCS Choshi Radio, Hondo, Japan
15. XAJ Tampico, Mexico
16. NBA Balboa, Panama CZ.
17. WNU New Orleans, La. USA.
18. KPH Bolinas (S.F.) Calif. USA
19. KFS San Francisco, CA. USA
20. KPE Seattle, Washington, USA
21. WAX Miami, FL. USA
22. WBF Boston, Mass. USA.
23. WPA Port Arthur, Texas, USA
24. WGO Chicago, IL. USA
25. KOK Clearwater (LA) CA USA
26. KMT Libbyville, Alaska
27. WCC Marion, MA. USA
28. KUP S.F. (News) SF Examiner
29. NPN Guam, Marianas
30. NPM Pearl Harbor, Hawaii (Oahu)
31. VLD Auckland Radio, N. Z.
32. OAA Callao, Peru
33. (M) Havana, Cuba
34. ICB Genoa, Italy
35. (Q) Bluefield, Nicaragua
36. LGN Bergen, Norway
37. EAB Barcelona, Spain
38. FFU Havre. France
39. VPS Hong Kong
40. MPD Poldhu, England
41. KCX Cuxhaven, Germany
42. GLV Seaforth, Liverpool, England.









## \*\*\*\*\*SCHEDULE\*\*\*\*\*

Place	Arrive	Depart
Philadelphia	---	6-28-33
St. Johns	7-5	7-6
Cartwright	7-10	7-17
Godthaab	7-22	7-25
Holstensborg	7-26	8-4
Julianehaab	8-7	8-10
Angmagssalik	8-15	8-15
Reykjavik	8-18	8-22
New York	9-4-1933	---

July 31st: Today we remained at our anchor and during the morning it snowed heavily.

August 1st: It is cold, no heat aboard, and the only way one can keep warm is by going to bed. Everyone is grouchy. We are hoping for a clear day so the Colonel can make his flight to Baffin Land then cross the icecap, and we can get underway for Julianehaab and Iceland. There is some doubt as to whether we will be able to get through the pack ice into Angmagssalik.

August 2nd: Another wasted day, the fog turned into drizzling rain which in turn became wet snow driven by a heavy wind.

August 3rd: The plane was readied for the Colonel's flight to Baffin Land. He took off and shaped his course to the west. He was over Davis Straits to Baffin Land where he made observations but did not land, having run into rather heavy weather. When he returned, we proceeded back into the fjord for Holstensborg to our old anchorage. Lindbergh plans to fly over the icecap, making the crossing from Holstensborg to Angmagssalik tomorrow if weather permits.

August 4th: The Colonel took off early in the morning intending to head for Angmagssalik on the east coast. The fog closed in and he changed his course for Scoresbysund. We shaped our course to the southward for Julianehaab, which is at the extreme end of Greenland. We are not sure of his plans. He may cross to Iceland from Ella Island direct, he may come south to Angmagssalik, or he may join us at Julianehaab.

August 5th: A gray dull day, not much progress.

August 6th: The Colonel left Ella Island today and flew to Angmagssalik.

August 7th: The fog cleared during the night. The steward brought forth the gasoline case and set up his barbershop on deck. We all got pretty good haircuts.

August 8th: Today came in with a thick fog bank, later it rolled away and out to sea. The day at Julianehaab ended fine and clear. Lindbergh took off from Angmagssalik and again crossed the icecap from east to west, flying from Angmagssalik to Godthaab where he refueled and flew to Julianehaab where he joined us. Our whole party was invited tonight to attend a reception at the governor's house. Although we were much handicapped by the fact they spoke no English, Commander Dam had to act as interpreter.

August 9th: Again hampered by weather, no flying was possible. Lindbergh plans to go up the coast again to Angmagssalik and cross to Iceland from there. I suppose the destination will be Reykjavik.

August 10th: In a drizzling rain and heavy fog, we left Julianehaab. We passed the lonely Italian port at the mouth of the fjord. They dipped their flag at us. Just two tiny frame houses and four men holding down the small outpost of civilization. The Italian flight is over—they have been there eight months waiting for someone to pass through who will carry them back home to Italy.

August 11th: Same old story—drizzling rain ending in a heavy fog. Lindbergh remained in Julianehaab and wired us it was inadvisable to attempt to get off.

August 12th: By nightfall it was blowing a 50-mile gale directly from the north, and the ancient Jelling was heading directly into it. We had men on the throttle watch continually to keep her from shaking to pieces and losing a wheel and her rudder. The old rudder is loose and has to be lashed with a yoke to prevent it from breaking adrift; however, the weather was clear inland and the Colonel flew up the coast to Angmagssalik.

August 13th: We have been making a speed of only three knots. Lindbergh remained at Angmagssalik all day.

August 14th: We picked up a little speed. The weather was bad at Reykjavik all day and Lindbergh remained in Angmagssalik.

August 15th: This morning four Eskimo men came out in kiais and escorted us through heavy ice to Angmagssalik. Lindbergh came out to meet us. We soon left the harbor. He took off immediately after we left, setting his course east for Reykjavik, Iceland. We are averaging about two knots per hour.

August 16th: New York has been wiring and wondering where Lindbergh intends to go now that he is in Iceland. His plans are uncertain and no one seems able to find out.

August 17th: Today came in with high northeasterly winds all day kicking up a heavy rolling sea.

August 18th: Today at noon the Jelling rolled her way into Reykjavik, Iceland. The town is much bigger than we expected to find. We had dinner at a very good hotel.

August 19th: We are in Reykjavik awaiting orders. Commander Dam leaves us today for Copenhagen, Denmark, and our cargo is discharged. There remains only the trip home.

August 20th: We are still awaiting orders, perhaps they will come tonight and we can set our course to the westward and the long trek over the North Atlantic toward home tomorrow.

August 21st: Still in Reykjavik and no orders. All in the party are tired; now the main purpose of the trip is over and we want to get back.

August 22nd: Today the orders came, we sailed for New York. Lindbergh took off for the Faroes and that is the last contact we shall make with the plane for he is headed for Denmark and we are heading west for New York. Just a lonely tramp steamer, her sides rusty and red, wallowing her way across the North Atlantic . . . headed home. Lindbergh made Copenhagen, Denmark, today—one can imagine the excitement there.

August 23rd to September 4th: Unexciting days, the excitement is over, our mission completed—well done.

September 4th: Today in a drizzling rain, the Jelling crept up the Narrows into Quarantine. The emigration and medical authorities finished, we passed up the harbor and past Liberty to dock at Pier 18, Brooklyn, and so ends the voyage. The first aerial survey for Transatlantic Air Transportation has been completed.



# The SKIPPER'S LOG



FYI

BY  
WILLIAM  
BRENNIMAN

for your information



## HOLIDAY GREETINGS M X H N Y

I would like to include my own personal greetings along with those of our staff, officers and directors ... to all of our members and friends around the world as this holiday season approaches. May you enjoy good health and happiness as we pass along into 1979.

Nothing would give me greater pleasure than to write a personal letter, acknowledging each and every one who has remembered us. Regretfully, workload and time do not permit, hence please accept this "THANK YOU" as a token of (my) our appreciation.

William A. "Bill" Breniman - President



## KUDOS TO OUR OFFICERS, DIRECTORS & STAFF

This is a time to take stock and count our blessings. As we near the end of another active year in which we have set new records for membership, chapter meetings and net participation, I would like to exercise my 'proxy' from all members, as a "Committee of One" to thank all who have made it possible which includes of course all of our dedicated officers, directors, chapter officers and net officials and perhaps last but not least all others who have given the Society so liberally of their time and ability in promotion of our organization. The cumulative result has been nothing short of spectacular and we are indeed proud of the 'image' you have helped to create for the Society. "THANK YOU ALL FOR A JOB WELL DONE!"

## S.O.W.P. HISTORY MADE BY HARRY H. WALTERS

Little did Harry Walters realize when he signed his application for membership on Nov. 20th 1978 that he would be making history for our good organization. We received his application 2 days later and 'it just so happened' to be the THREE THOUSANDTH MEMBER to join the Society since it was founded back in January 1968... a bit over ten years ago. Only two other members have had the distinction of passing the 'thousand mile milestone'. Brother Harry E. Stahl of Trenton, N.J. became member No. 1000 on Feb. 16 1972 and Andrew F. Halcrow of Edinburgh Scotland became No. 2000-P on May 27 1975.

In addition to the 3000 (plus) members who have joined the Society, we also have nearly a hundred Technical Associates. These are individuals who have not actually operated circuits but who have designed or invented equipment we use, installed and serviced it, written technical papers and books about it or have in administrative positions, assigned us to our stations of assignment, (etc). While they are not voting members, they do bring a wealth of experience in our field, complimenting that of our members and we welcome them all.

## SOCIETY REFERENCE LIBRARY

We are happy to report that member ELMER H. BURGMAN 484-P who recently moved to Santa Rosa from Southern California has volunteered to become the Society's new Librarian.

Elmer has now spent several weeks working in our store-room trying to bring order out of chaos. We have many boxes and cartons of books, artifacts and memorabilia of all kinds that need organizing, hence he has been setting up shelves and has undertaken to separate and catalogue books (estimate 700 to 800) and otherwise 'shore up' the activities in this area. This will include the cataloguing of all books following the system used by the Library of Congress. Mr. Burgman has had considerable experience in the field since his wife has been in the antique book business active and inactive for many years and Elmer has assisted. He is therefore quite informed and we expect, given time, that our library will become invaluable for reference and research purposes. Procedures for the loan and handling (processing) will have to be worked out. Mr. Burgman has also offered to assist in other fields as his time permits. He will perhaps take over the handling of all SLOP CHEST items at an early date. We are indeed glad to have Elmer aboard and since he lives near Headquarters, he is in position to be a very valuable assistant. We feel indeed fortunate that the Burgmans moved to Santa Rosa.

## Point of view ...

BY  
WILLIAM A. BRENNIMAN  
FOUNDER & PRESIDENT



### TEMPUS FUGIT

This is a serious note to all members. It concerns not only the President of your Society but it holds true for quite a few other officials. Some of us are near or past 80. We still enjoy our work and wish to carry on as long as possible ... however... longevity tables supply actuarial facts which shouldn't be prudently overlooked. It is time for some of our younger members to volunteer and assume more of the workload of the Society to insure continued growth and smooth operation in the years to come. Transition should be orderly. I am sure all of us would do everything possible to assist those who relieve us to 'carry on'. Election of National Officers will be in May 1979. We invite those who feel they might like to volunteer for National Offices indicate their interest. The nominations committee will keep all correspondence confidential.

### SOWP LEGAL REPRESENTATIVE EAST

We are happy to report that Technical Associate Duncan Kreamer (TA-73) whose OTH is P.O. Box 637 Vineyard Haven, MA 02568, has volunteered to act as the Society's Legal Representative in the East, should we ever need his services on legal matters. "Dunk's ham call is W1GAY. He has extended his offer to include the "old time" members of the Society who are welcome to write or contact him.

### FRED ROSEBURY BECOMES ASSOCIATE EDITOR

We are happy to report that Fred Rosebury 1570-SGP who lives in Natick, MA has offered to assist in the editorial area of our publications and has been named as Associate Editor by our President. He will undertake to review some of the material submitted by members for publication, editing and/or reviewing and rewriting as necessary. This is a field where time has been inadequate to cope with the volume of material furnished. We hope Mr. Rosebury can materially aid in speeding up preparation of copy for inclusion in the Journal and other Society publications. Fred has had considerable experience in the editorial field and the publishing of books etc. We welcome Fred to the Staff of the Journal and Sparks. You may hear from him from time to time on behalf of the Society.

### DUES — 1979 & BEYOND

Dues for 1979 will continue at \$7.50 per annum. The cost of supplies including paper and such services as publishing, postage for mailing, in fact just about EVERYTHING has or is going up (as if we need to tell you). We are feeling the pinch and it has been suggested by many that we consider increasing the yearly dues to \$10.00 following the lead of some of our contemporary organizations. However, we do realize the plight of many members whose annuities are not keeping pace with the cost of living, hence we are going to 'hold the line' for another year, the best we can. Hopefully, some of our more affluent members who can afford will add a little extra as a donation to bridge the gap in covering increasing expenses of the Society.

We plan to mail out statement to those who have not paid 1979 dues around Feb. 1st 1979. These will go ONLY to those who have NOT PAID, as mentioned for 1979. It will save us billing expenses (postage and cost of processing) if payment is received BEFORE that date which will be appreciated. Members living in foreign countries are requested to pay dues in US FUNDS... also since the devaluation of the dollar it might be well to point out that cost of 'exchange' to convert foreign checks and money orders not in U.S. funds further reduces the amount received. Since it costs more to mail (postage) to foreign countries it hits pretty hard. It is requested that those inquiring about their dues send along a S.A.S.E. to reduce workload in answering such requests.

### ABOUT OUR NEXT JOURNAL

You may have noticed that this issue of the JOURNAL has not carried much information about members, chapters or nets with exception of minimum listings and the names of Silent Keys (since last edition).

We plan to devote the coming issue members. First a substantive listing of vital statistics covering New Members, Technical Associates plus Silent Key and Necrology listings. It is hopeful that Chapters and Net officials will furnish much of the details in their area for direct publication. We are hopeful that we can publish this issue by February 1st 1979 if conditions permit. Newsprint seems to be in short supply at present and may affect our plans but there is nothing much we can do about it except to hope for an early end to the strike in the Western U.S. paper mills

### SILENT KEYS

JARBOE, Wilson T. Jr.	678-SGP	----	July 4 1978
VAN DYCK, Capt. Arthur F.	405-SSGP	----	June 21 1978
COLE, Theodore F.	1832-SGP	----	July 13 1978
JOHNSON, George R.	499-SGP	W7DBZ	July 23 1978
REAGAN, William B.	2504-V	----	June 30 1978
SMITH, Capt. Clarence B. Jr.	1785-SGP	----	Aug. 3 1978
CROUSE, James W.	433-SGP	K6WQ	April -- 1978
SIMA, Joseph A.	1486-P	W9FLK	May -- 1978
ARTHURS, Leo J.	1732-SGP	WØDZV	Aug. 3 1978
COPLAND, Col. Harry D.	893-S/SGP		1978 ?
ATIENZA, Jose R.	911-P	WA6BYZ	July 30 1978
DANCEY, Thomas B.	493-SGP	---	Aug. 9 1978
BRYANT, William J.	2298-SGP	---	June - 1977
JOHNSON, William F.	1284-SGP	W6FD	Sept. 25 1978
McAULEY, Charles G.	2437-P	W1KJ	Oct. 13 1978
STEWART, Charles F.	2675-P	WB7ABI	Oct. 3 1978
RYALL, Jack L.	1966-V	---	Aug. 31 1978
HARRIS, Carl H.	2360-P	W1SVH	Oct. 21 1978
CRÉSSE, Alfred S.	122-S-SGP	K2IX	Oct. 28 1978
WITHINGTON, George M.	2110-P	W8ZB	Oct. 26 1978
BOEHM, John C. III	1677-M	---	May 9 1978
SMITH, Harlan V.	TA-43	WA2PWZ	Oct. 23 1978
MARTHENS, Albert F.	924-SGP	W9OR	Nov. 26 1978
LOTYSH, Matthew J.	2585-P	WB6KHT	May 26 1978
McGARY, Jack	2683-SGP	---	Nov. 1978
FRITTS, Cdr. Faun S.	926-SGP	WØID	Dec. 3 1978
PLUMEAU, Harry H.	1747-P	W6RNZ	Dec. 4 1978
CORPE, G. Stanhope	29-S-SGP	W6LM	Dec. 11 1978
KINNE, Laurance W.	823-SGP	W8EU	Dec. 8 1978





Wilson Turner Jarboe, Jr., Radio Officer of the China Clipper.



In tribute to an immortal American...

**HISTORICAL PAPER**

STORY PAGES 19 & 30



**LOG—EPIC FLIGHT REPORT—"CHINA CLIPPER"—1935**

--- RECORDED BY W. T. JARBOE JR. 1935 ---



Alameda to Manila and return, "CHINA CLIPPER" NC-14716 (Inaugural flight" Pilot Musick, Radio Operator Jarboe.

For positions of plane at various times please refer to Radio Direction Finder charts of this flight which have been submitted under separate cover. All times logged art GCT.

**ALAMEDA TO HONOLULU - Nov. 22nd & 23rd 1935.**

The NC 14716 "China Clipper" departed from Alameda on Nov. 22nd at 2347 GMT. For two hours after departure bearings on all high frequencies 5165, 2986 and 1638 seemed to be very erratic, the ground station at Alameda reporting no minimums, or such rapidly shifting minimums that bearings could not be considered accurate. Due to this condition 500 kcs was used for a time, although only two bearings were possible on this frequency. This condition of high speed fading and rapidly shifting bearings I attributed to the fact that it occurred during the transition period between day and night. Sunset occurred one hour and 23 minutes after departure, and darkness 1 hours and 58 minutes after the departure from Alameda, which covered the period of erratic bearings.

Shortly after darkness, from 0145 GCT to 1230 GCT bearings taken by the Alameda Station on 1638 kcs were fairly accurate and consistent with the navigators position reports and celestial fixes obtained by him. However 5165 kcs seemed to be of no use. Tests were made with it at various times but the Alameda station was unable to obtain any definite minimums on this frequency during the night.

Bearings were taken by the plane Direction Finder on station KPO at San Francisco up to 0800 GCT, eight hours and fifteen minutes out of San Francisco. All of these bearings were an average of from six to eight different readings, and while the averages showed up fairly accurately on the final charts, they were very indefinite and from the viewpoint of the plane operator could not be conscientiously stated as reliable bearings. Minimums were shifting from 20 to 30 degrees after darkness and at times there would be no minimums at all. However the averages of from six to eight readings seemed to show up fairly good on the final charts.

Honolulu began taking bearings about nine hours from Honolulu but they were all given as approximate until the plane was within three hours of that station. Daybreak occurred five hours and thirty minutes before arrival and sunrise four hours and forty minutes from Honolulu. (CONTINUED ON PAGE 25)

The story of J. T. Jarboe Jr's. life is like reading the exciting history of pioneering the overseas air routes of the world by the great commercial airlines.

Intimates called J. T. Jarboe "Turner" but most of us in radio knew him as "Bill" -- thanks probably to some Pan Am P/R man who mistook his first initial "W" (Wilson) for William, hence "Bill". It stuck!

"Bill's" first assignment was aboard the SS Munalbro (KUX) in 1925. Following 6 years at sea he joined Pan Am and spent 40 years in aviation communications before retirement in 1970. His last position was as Division Communications Supt., Atlantic Div., Pan Am. He was one of the true pioneers in establishing reliable communications between air and ground around the world. Many of the routes flown today were surveyed by Jarboe and Lindbergh.

"Bill" joined the Society in 1970. He had always intended to furnish us a 'first hand' report of his experiences but Divine Providence called him for his last flight on July 4 1978. We are very grateful to his wife Jane for the furnishing of the historical information we have used in these pages. Thanks is also extended to Society member "Pete" Fernandez who has held many key positions around the world in both military and commercial aviation for sponsoring "Bill" for membership (No. 678-Spark-Gap Pioneer).

Wilson Turner (Bill) Jarboe Jr. was a very gifted but unassuming and modest man who left his hallmark on the building of our overseas airways. We all join in giving him posthumous credit for his achievements, recalling his dedicated interest and the pioneer spirit that has always guided him. - 30 -

\*\*\*\*\* The "Wireless" - Our Proud Heritage! \*\*\*\*\*

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To:

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~ Dedicated to the History of Seagoing Wireless Operators ~

Special thanks to the following for these documents:  
Key [SK = Silent Key, SGP = Spark Gap Pioneers, P = Pioneers,  
V = Veteran, M = Member, Sparks = Worked at Sea]

- (SK) Ed Raser, W2ZI, Radio Pioneer, Sparks, SOWP #35-SGP
- (SK) Bill Gould, K2NP, Radio Pioneer, Sparks, SOWP #565-P
- (SK) Matty Camillo, W2WB, Sparks, SOWP #750-SGP
- (SK) Dare Robinson, WB2EVA, Sparks, SOWP #2284-SGP
- (SK) Ray Brooks, K2LTX, Sparks, SOWP #1387-P
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